

EXPORT CATALOGUE SERIES

2016

ELECTRICAL **& ELECTRONIC ENGINEERING**

COMPONENTS | INSTRUMENTS | EQUIPMENT



Dear colleagues,

On behalf of the National Research and Information Center for Monitoring International Commodity Markets "DZI" please let me present the export products catalogue "Electronic & Electrical engineering". This catalogue is a pilot issue out of a series of publications dedicated to the goods that have a potential to be exported from Ukraine and, first of all, will introduce the scientific and R&D potential of the high tech industry.

Why instrument making industry? It is an important part of the Ukrainian economy and has a powerful scientific and production base. National companies manufacture a wide range of instruments: testing and measuring equipment, automation equipment, controlling & computing devices, other instruments, equipment and devices that are of high demand for different manufacturing and production application. Intensive world cooperation puts Ukraine in a key position in the international production cycle. As for 2015, national products were exported to 149 countries, total value over \$769 million and 53% account for the EU countries. Since Ukraine signed the association agreement with the EU in 2014 national companies have strengthened their positions in the EU markets and can implement the scientific and R&D potential as well as establish deeper cooperation.

The competitiveness of Ukrainian products in the world is backed up by the local engineering education system that is on the level of the leading world technical schools and universities. Thousands of engineers annually graduate from over 250 higher educational establishments majoring in technology and technical sciences, find their place in companies and enterprises as well as find themselves involved in research and science studies. Therefore, Ukraine has enough human resources to provide engineers sufficiently trained for both local industries and for world class R&D.

Please proceed to the Catalogue of Electronic & Electrical engineering and, hopefully, it will lead to new contracts along with fresh business opportunities.

Truly yours,

Yuriy Lazorenko CEO of State Enterprise "Derzhzovnizhinform"

Dear ladies and gentlemen,

Instrument making industry is a primary element for global technology development. As our life and current activity can't be even imagined without electronic devices, guided by processors and programs. Ukraine constantly stood at the foreground of technology development, being among the major producer of electronic devices. General background for industry foundation was laid since the time of the Soviet Union, while for now the country still retains its considerable human and technology capabilities. Engineers from Ukraine are well known over the world, being those who developed/constructed both space shuttle "Buran", and unique over-cargo airplane AN-225. Software programmers from Ukraine are now highly demanded worldwide, owing to their fine name of outsourcing program developers.

Currently, almost all Ukrainian instrument-making enterprises are privately-owned, most of them were given good names by the market, along with developed range of products, and loyal customers. Offered products are certified and of high quality, made up using world-trust and up-to-date equipment. The products of Ukrainian industry are represented at markets of the EU, Asia and Africa, with hopeful further taking more markets all over the world. Today the main challenges are: the search for new trade directions, change of the costumer's stereotypes, and finally prove that not only German products constantly stand as European quality and reliability standard.

The most successful instrument making companies and their products were recently united within the Association of Instrument-Makers of Ukraine, brought to your attention as per this catalogue. All companies offer the costumer a complex approach, by offering not only individual units/instruments/sensors, but providing full range of devices, the so-called instrument/software complexes, capable to be personally adjusted, relative to the client's demand. Complex approach, combined with high quality and reasonable prices, are the 3 main elements, making up Ukrainian production. We strongly hope that foreign customers will appreciate effective cooperation towards Ukrainian producers and this positive experience will grant us an impulse for mutually beneficial trade in future.

Sinceriously yours,

Anatoliy Yakimets President of the Association "Instrument-makers of Ukraine"

Content

Ukrainian export of instrument making commodities in 2015

Geography of export.		•	•	•		•				•	4
Commodity structure											5

Company's Products

Sensors, controllers, control systems for general industrial applications

TERA, PJSC										6
AKON COMPANY LTD.										8
ELEKTROSWIT, PP									. 1	0
NOVATEK-ELECTRO L	TD								. 1	2
TEMS, STC, LTD									. 1	4
EOS LTD									. 1	6
WEL, PE									. 1	8
MIKROTERM LTD									. 2	20
MICBOL LTD									. 2	2

Intelligent equipment, metering devices,

instruments for radiological and chemical analysis, medical diagnostics devices

TELETEC LLC	4
SPARING-VIST CENTER, SPPE, PE	6
POSITRON GMBH LTD	8
SEMPAL LLC	0
ELVATECH LTD	2
RADMIR COMPANY	4

Radio-technical systems

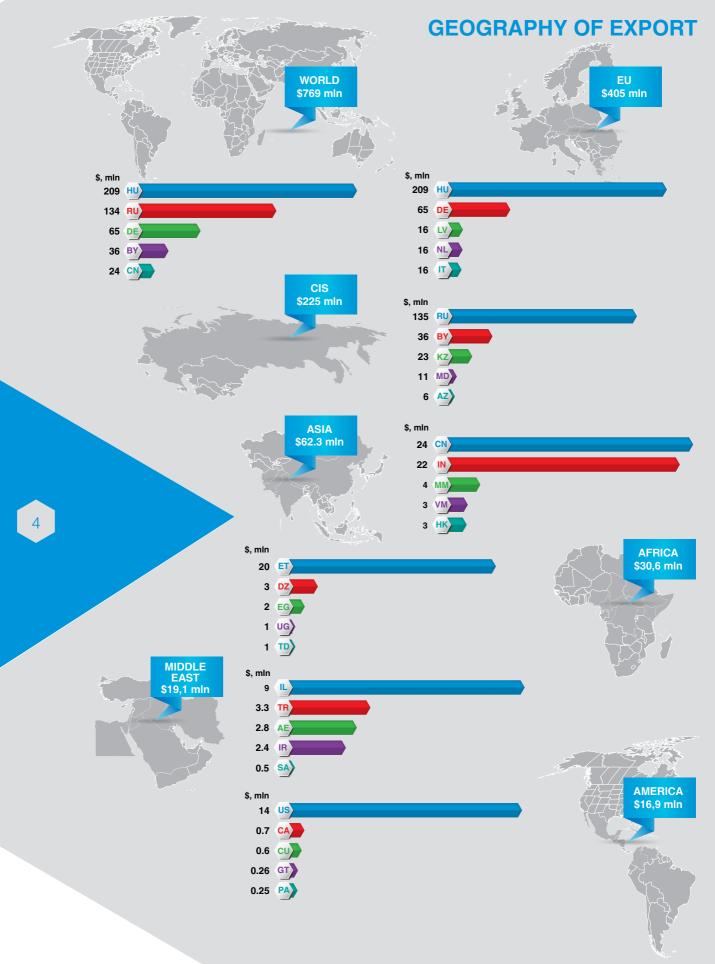
UKRSPETSTECHNIKA, HC, PJSC	36
ORIZON-NAVIGATION, SE	38
UAVs	
UA TECHNOLOGY LTD	40
DRONE.UA	42
UKRSPECSYSTEMS	44
About Derzhzovnishinform	46



All companies offer the costumer a complex approach by offering not only individual units/instruments/ sensors but providing full range of devices, the so-called instrument/ software complexes capable to be personally adjusted, relative to the client's demand. Complex approach combined with high quality and reasonable prices are the 3 main elements making up Ukrainian production

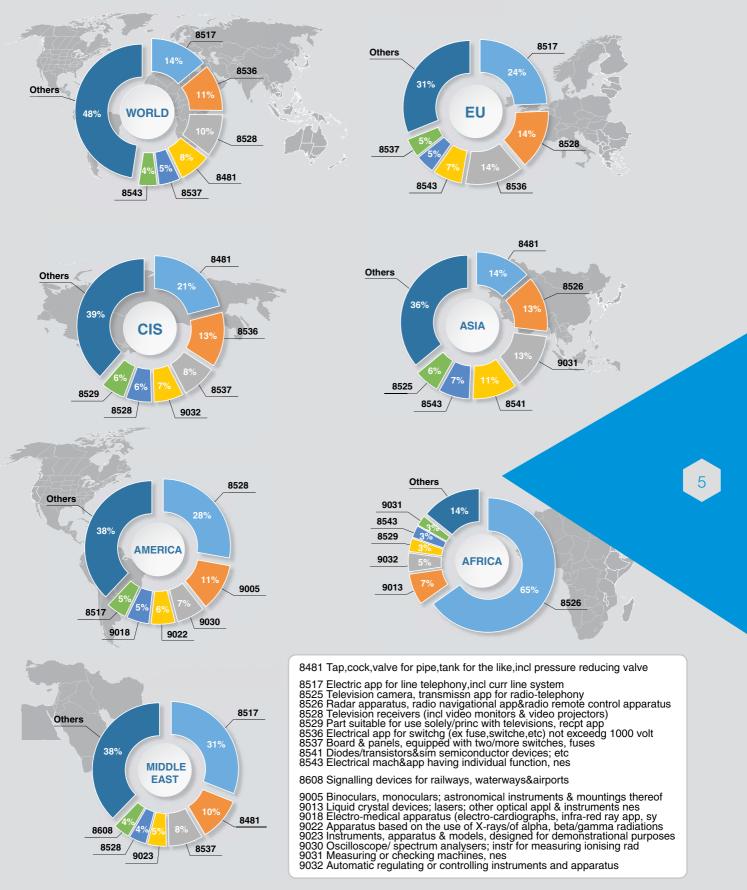
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UKRAINIAN EXPORT OF INSTRUMENT MAKING COMMODITIES IN 2015



UKRAINIAN EXPORT OF INSTRUMENT MAKING COMMODITIES IN 2015

COMMODITY STRUCTURE



TERA, PJSC



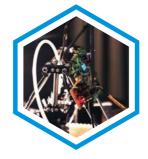
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General information

Products Temperature probes, humidity sensors, carbon dioxide converters, portable measuring instruments, controllers, data loggers, paperless recorders, software, power supply panel boards

Range of applications Ventilation and air conditioning, hot water supply and heating, vegetable and mushroom growing, poultry and incubation, transportation and storage of food and pharmaceuticals, jewelry production

Main export markets		
		Founded in
		Certificates in use ISO 9001:2009, TU U 33.2-14242882-001:2011, TU U 33.2-14242882-002:2011, TU U 26.5-14242882-003:2012
		Awards
	I	Benefits Our enterprise uses own imported machine tools for manufacturing a wide range of high performance and quality parts



P roducing wide range of sensors, controllers, etc.



6

TEMPERATURE PROBES

Temperature probes are used for measuring temperature by various industries. Three individual types of sensors having wide design and temperature range

Types of sensors .		resistance temperature detector (RTD),	
		thermistors, thermocouples	
Measuring range .			
Any probe			
Other		any industry, including explosive environments	

HUMIDITY SENSORS

Humidity sensors are used for measuring air relative humidity by various industries. TERA produces three main types of sensors: capacitive sensors, psychrometers and aspiration psychrometers

Technical characteristics

Types of sensors	
Capacitive sensors	
Measuring range	
Response time	





CONTROLLERS

Controllers are designed for measuring and controlling various physical and logical variables (temperature, humidity, pressure, current, etc.). Used for many applications related to the technology sectors of automation

Technical characteristics

Types of inputs RTDs, thermocouples, all-purpose, current, voltage
Accuracy class
Repeatability
Types of outputs
220 V 50 mA AC optosimistor,
12 V 20 mA DC voltage 2 V B 200 mA DC voltage

12 V 20 mA DC voltage, 2 V B 200 mA DC voltage, 40 V 30 mA DC open collector

DATA LOGGERS

Data loggers are miniature electronic devices with self-contained power supply and USB interface. Both used for measuring and logging various physical parameters: temperature, humidity, CO2 concentration etc.

Technical characteristics

Temperature Range Measured by External Probe50100 °C
Temperature Range Measured by Internal Sensor2060 °C
Humidity measuring range
Temperature accuracy
Humidity accuracy
Logging interval
Memory
32000 (temperature and humidity readings)





AKS CONTROLLERS

AKS is a mushroom grow controller designed for automatic environmental control of mushroom cultivation and compost production

- 16 RTD inputs
- 8 analog inputs for connection of relative humidity sensors, gas analyzers, feedback sensors, etc.
- 8 analog outputs for control of air dampers, frequency inverters, etc.
- 16 digital outputs for control of fans, humidifiers, pumps, etc.
- Manual and automatic control modes

AKON COMPANY LTD



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٢	Web	· · ·	
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General information

	Products Input-output devices for industrial automation: analogue input-output modules, discrete input-output modules, galvanic isolation, interface converters
\bigcirc	Range of applications industrial automation, scientific research, special automation tasks, educational boards
	Main export markets
-	Founded in
	Benefits



Development and serial production of high-quality measuring devices: – remote terminal unit (RTU) modules

- converters of signal from sensors
- modules for signal normalization from thermocouples and RTDs
- RS-485 based controllers for distributed systems

WAD-AIK-BUS (USB)

8

4-channel RS-485/USB module of analogue input with the channelized galvanic isolation. Depending on the input configuration: voltage, current, resistance, thermocouple, RTD, tensometry, True RMS, frequency, spectrum. Protection of all inputs/outputs

Number of channels 4 Galvanic isolation channel by channel 1.5 kV ADC resolution 24 bit Accuracy for voltage measurements 0.05%
Accuracy for current measurements up to 100mA
after 100mA
Accuracy for resistance measurements not more than 0.07%
Schematics
Boxes and terminals
Warranty





WAD-A-MAX

Single-channel module of galvanic isolation. Input connection is 2-, 3-, and 4- wiring circuit. Voltage, current, thermocouple, tensometry, RTD. Cold shut compensation, linearization of characteristics. Normalized current or voltage output. The accuracy is 0.07%. Supply voltage 10-30 V. Terminals for the screw

Technical characteristics

Number of input channels	1
Number of output channels	1
Bandwidth	
Galvanic isolation channel by channel	5 kV(2.5 kV if require)
Basic reduced error of converting DC voltage	0.05%
Boxes and terminals	ix Contact (Germany)
Warranty.	3 years

6

channel

WAD-AO6-BUS

6-channel RS-485 module of analogue output with the channelized galvanic isolation. The choice of the output signal – when ordered. Programmed setting of output range and the value of the output levels on default after powering-up. Protection of all inputs/ outputs

Technical characteristics

Number of channels
Galvanic isolation channel by channel 1.5 kV(2.5 kV if require)
DAC resolution.
The relative error of the voltage
Relative error of the current
Boxes and terminals
Warranty



WAD-DI14-BUS

15-channel RS-485/USB module of discrete input, conventional or "dry contact" with built-in contact powering, group galvanic isolation, line break control. Protection of all inputs/outputs

Technical characteristics

 Number of channels
 15

 Galvanic isolation channel by channel
 1.5 kV(2.5 kV if require)

 Input logic levels "1"
 AC/DC voltage

 2.5 V...500 V (specify when ordering)

 The line break control

 in the configuration of dry contact.

 Boxes and terminals.

 Phoenix Contact (Germany)

 Warranty.

 Syears

WAD-DOS12-BUS

12-channel RS-485 relay block with contact protection. 4 independent group 3 in 1 of contact closure with load current up to 5 A without protection, and 500 mA with the protection against inductance inductive load and surge voltage. Protection of all inputs/outputs

Technical characteristics

Number of channels	12 normally open
	4 groups of 3 relays
Galvanic isolation channel by channel	1.5 kV(2,5 kV if require)
Maximum switching current	
Maximum switching voltage	
Boxes and terminals	
Warranty	3 years

12 channel

ЕЛЕКТРОСВІТ[®] ELEKTROSWIT, PP

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?	CEO Ms. Olha Boyko, Director	Contact Mr. Roman Boyko, Head of the Commercial Department

General information

	Products
Ø	Range of applications House, apartment, engineering equipment, industry, monitoring, manage equipment by mobile phone
	Main export markets
	Founded in
	Certificates in use
	Awards ES-ForthLogic™H04 (MAX Logic H04) was the product of the Year 2011, according to the publication ELEKTROSYSTEM in Warsaw, in AUTOMATION category
	Image: Second system Benefits ES-ForthLogic™SG / ST / SB / SE is freely programmable logic controller with modular architecture, with the ability to build IVR-arbitrary tasks, that is interact with the system using your own voice menu

ES-FORTHLOGIC[™] SG PROM (MAX LOGIC SG PROM)

ES-ForthLogic[™]SG PROM controllers are universal freely programmable logic controllers of modular architecture, intended to build closed and integrated into other control loop systems, arbitrarily engineering and industrial equipment of small / medium complexity in the home (ES-ForthLogic[™]SG) and industry (ES-ForthLogic[™]SG prom)

Technical characteristics

Slot Sim-card
USB
Communication protocol
Memory card
Power supply
Dimensions
Other





ES-FORTHLOGIC[™]PI-1L (MAX LOGIC PI-1L)

ES-ForthLogic™PI-1L controllers are designed for current measurement and transmission of measured values on the uniform output of 4-20 mA

Technical characteristics

Maximum measured current	
Max. the measured voltage	285 V AC / 400 V DC
Maximum short-term overload	100 A (1 impulse 100 msec)
Accuracy of measurements	±0,5%
Supply voltage	9 - 30 V
Maximum current consumption	
Output current	4 - 20 мА
Dimensions	. 1 mdule type S (17,5 mm)
Others	th warranty, din rail mount on

. RS485

ES-FORTHLOGIC[™]AI-1M (MAX LOGIC AI-1M)

ES-ForthLogic™AI-1M controllers are intended to expand the number of analogue inputs of programmable logic controllers. Information exchange with the device is performed via the RS485 serial interface according to MODBUS RTU protocol

Technical characteristics

Number of analog inputs	Serial interface
Measurement range	Protocol MC
Input voltage 0 – 10 V	Protocol parameters 960
Input current	
Measurement precision 0.5% of full scale	Other
Voltage 9 – 30 V	



Technical characteristics

Protocol parameters . . 9600 bits / s, 8 data bits, 2 stop bits, no parity Other 18 month warranty, le din rail mount on

Protocol MODBUS RTU, slave

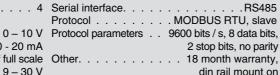
ES-FORTHLOGIC[™] H04 (MAX LOGIC H04)

ES-ForthLogic™H04 (MAX Logic H04) controller is a versatile freely programmable register GSM-controller with voice features. Controllers are designed to address a wide variety of logical tasks of process control, logging of process parameters and communication using cellular GSM 900/1800 networks modes voice call, SMS and CSD (modem connection "point to point"). ESForthLogic™H04 (MAX Logic H04) controller can be used for domestic and industrial automation problems of small and medium level of complexity



11

Measurement range Input voltage Measurement precision 0.5% of full scale Other.





ES-FORTHLOGIC[™] PU-1M (MAX LOGIC PU-1M)

ES-ForthLogic™PU-1M controllers are designed for voltage measurement and transmission of measured values via the serial interface controller according to the MODBUS RTU protocol

Maximum measuring voltage
Measurement accuracy
Supply voltage
Maximum power consumption
Serial interface
Protocol
Protocol parameters
Other

NOVATEK-ELECTRO LTD



T

12

	Address						
	Phone +38 (048) 738-00-28, 777-94-86, 736-64-36, (063) 301-30-40, (050) 359-39-11, (067) 557-12-50, (050) 477-55-56; +38 (0482) 34-36-73 (F)						
	Web						
?	CEO Mr. Oleksandr Bogachov, Pirector	Contact Mr. Andrey Salo, Manager of IBA Phone					

General information

Products Voltage relays, time-delay relays, programmable timers, programmable controllers, universal induction motor protection devices, limiter active and reactive power, communication devices and harmonization, healthy phase selector, recorders, voltage regulators

Range of applications	 	Extractive	indu	stry, manı	ufacturing, electricity, municipal sphere, transport system, telecommunication
Main export markets	 				EU, CIS, India, Kenya, Nigeria
	Founded	in			
	Certificat	es in use			Declaration of conformity
	Benefits			Productio	on Line Volt Control, service Overvis

Design and manufacture of electrical equipment with a view to its subsequent sale





HEALTHY PHASE SELECTOR

Designed for powering industrial and consumer single-phase load of a three-phase four-wire network in order to ensure uninterrupted power supply of high-power single-phase consumers and protect them from harmful voltage fluctuations in the network. Depending on the availability and quality in the main phase the device selects the best healthy phase and rapidly switches the single-phase load to the phase elected. It is used in industrial, municipal, transport and energy sectors

SINGLE-PHASE VOLTAGE RELAYS

Single-phase voltage relays are used for protection of single-phase loads, equipment and machinery against un-allowable mains voltage drops and fluctuations as well as against the consequences of neutral line cut-offs. They can be utilized both as independent switching devices and, as relays. Operation range of adjustable parameters includes auto reclosing time delay settings for the protection of machinery and installations with long-term transient dynamics, like refrigeration and compressor units. It is intended for use in municipal and industrial spheres



13



THREE-PHASE VOLTAGE-SENSITIVE RELAYS

Designed to protect of three-phase loads against unallowable mains voltage variations, phase loss, phase imbalance, phase coincidence and incorrect phase. They are highly effective to protect any three phase electrical equipment and circuits, including equipment with long-term transient dynamics and electric motor load as well as installations where continuous monitoring of quality, availability and three phase lines presence of the mains voltage is required. They are designed for mining, manufacturing, electric power industries, municipal sphere, transport systems and telecommunications

PROGRAMMABLE MULTI-FUNCTION TIMER

Programmable multi-function timer is a microprocessor-controlled device to control the load depending on real-time without the need for constant maintenance, with minimum costs and maximum energy saving.

The timer can be used to turn on the heating, pumps, fans, automation for school bells, street lighting, and illumination of facades of buildings (adjacent areas, parking lots and other facilities). It is designed for mining, manufacturing industries, electricity, municipal sphere, transport systems, telecommunications





UNIVERSAL INDUCTION MOTOR PROTECTION DEVICES

They are designed for continuous monitoring of mains voltage parameters and electrical equipment, primarily of induction motors, including those functioning within insulated neutral circuits.

They provide full and effective protection of electrical equipment by isolating it from running system and/or disabling its starts. It is used in industry, power industry, and transport system and in telecommunications

TEMS, STC, LTD

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Ş	CEO Mr. Vitalii Stiazhkin, Director	8	Contact Mr. Vitalii Stiazhkin, Director Phone +380 (44) 456-42-48 E-mail tems@ukr.net Languages English, Russian

General information

\sim	Products Voltage regulators, electronic starters, soft starters, automated process control systems
R	Range of applications Energy companies, thermal power stations, nuclear power stations, processing plants, polymer, glass, rubber, food production plants
	Main export markets
	Founded in
	Certificates in use



14

We provide all range of works: from development and design through to maintenance and service of power converter technology, electronics, process control systems for energy companies and other industries

VOLTAGE REGULATORS

RENAP-1T, 3T (220 V; 380 V to 1400 A) are used for electric heaters, for power transformers in the heating technology and melting material modification

RENAP-1B (1x220 V; to 50 A) are used for electromagnetic shakers and heaters

RENAP-3B (3x380 V to 1400 A) are used for power electromagnets, electromagnetic separators, synchronous hydroelectric generator windings



ELECTRONIC STARTERS

PEL-3 (3x380 V to 300 A) are used for electric heaters in heating, drying, lighting systems

PELR 3-20 reversing starters (3x380 V to 20 A) are used for valves in the equipment of boiler, heating plants and thermal power plants

PEL-3DT (to 300 A) are used for electric heating supply systems

SOFT STARTERS

PEL-3 (3x380 V to 300 A) are used for electric heaters in heating, drying, lighting systems

PELR 3-20 reversing starters (3x380V to 20 A) are used for valves in the equipment of boiler, heating plants and thermal power plants

PEL-3DT (to 300 A) are used for electric heating supply systems



15



AUTOMATED PROCESS CONTROL SYSTEMS

APCS are used to control process parameters of heating plant boilers and thermal power plants, nuclear power plants, in the mining and processing plants, automation boilers and pumps

EOS LTD



16

	Address	. 82, Ac. Pavlov Str., 82, Kharkov, 61039, Ukraine
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	Web	www.eosltd.com.ua inquiry@eos.kharkov.org
Ş	CEO Mr. Yury Shindnes, Director	Contact.Mr. Eugene Pedan, Deputy DirectorPhoneFmailLanguagesEnglish, German, Russian

General information

Products Medium voltage variable frequency drives of 630 – 12 000 kW capacity Low-voltage variable frequency drives of 630 – 1600 kW capacity Frequency converters Low-voltage controlgear assemblies
 Range of applications
Main export markets
Founded in
Certificates in use

D esign, manufacturing, delivery, turnkey commissioning and service of variable frequency drives, frequency converters and low-voltage controlgear assemblies





MEDIUM VOLTAGE VARIABLE FREQUENCY DRIVES

Drives are designed for frequency regulation of speed of pumps, fans, compressors and other mechanisms on the base of squirrel cage induction motors.

Drives provide frequency start, frequency regenerative braking and continuous operation of electric drive in operational frequency range

Technical characteristics

Unique features and benefits

A container version with climate control. Minimal construction costs and fast commissioning. A wide range of possible ambient temperatures - from -60°C (-76 °F) up to +50 °C (122 °F)

Comfort for motor and load – sine wave output voltage and practically sine wave output current

High reliability



in/output

Comfort for network - low input harmonic current meets IEC 61 800- 3 (2004- 08) and IEEE 519 (1992) requirements.

Other

Drives can be installed outdoors at severe climatic conditions and meet the strictest requirements for oil and power industries, especially for reliability

LOW-VOLTAGE VARIABLE FREQUENCY DRIVES

Drives are designed for frequency regulation of speed of pumps, fans, compressors and other mechanisms on the base of induction motors

Technical characteristics

Unique features and benefits

Comfort for motor - sine wave output voltage, output filters are not required

High reliability

Comfort for network - low level of harmonic currents

Regeneration

Other

Installation in various premises and structures



WEL, PE



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?	CEO Mr. Sergey Shoferistov, Director	8	Contact . Mr. Sergey Shoferistov, Director Phone +380 (44) 434-83-44, 200-93-54, 206-08-12 E-mail . Languages .

General information

Products
Range of applications Power engineering, mechanical engineering, civil engineering, medicine
Main export markets
Founded in
Certificates in use
Awards

Benefits The company is based on the KVAZAR plant in Kyiv. It has all necessary manufacturing facilities and skilled management, engineers and technical staff. All managers, engineers, departmental managers has higher education, the deep technical knowledge, experiences in production and development. Technical staff are also highly qualified and has necessary knowledge and skills.

FAMILY CONTROL UNITS, AUTOMATIC TRANSFER SWITCHES ATS

The relay is designed to control AC voltage in an electrical network. It is used in the schemes of relay protection and automation of power systems, alternative energy, power input devices for the protection of industrial equipment and home appliances

Features of the device

- Determination of the RMS value of the voltage produced with high precision, by repeatedly measuring the voltage during each period of the mains voltage and mathematical treatment of the results in real time
- Indication of the measured voltage
 Galvanically isolated output contacts
- Galvanically isolated output contacts
- Programmable values for the upper and lower threshold voltage operation
- Programmable limits and settings using the buttons
- Does not require auxiliary power supply (powered by the monitored line)
- The relay is execution, cover a wide range of controlled AC and DC voltages
- Mounting on DIN-rail, modern European design



PE "WEL" - Ukrainian manufacturer

of control devices, power

engineering automatics, medicine, industry



CORRIDOR SWITCHES

Light switches (flight switch) are used to control the lighting of floor corridors, staircases, playgrounds before dustbin valves, transitions, etc. Allows you to enable and switch off the lighting automatically after a specified period of time.

Perfect for applying when constructing and re-constructing the residential houses, controlling the artificial lighting of staircases, floor corridors and grounds.

Light switch delay can be set in a range from 1 to 10 minutes on a current up to 2 A, 220 V, 50 Hz.

Used for replacing the mechanical circuit breakers stairwells type AB- 01-2.5/220 and AV-2M

RN1 VOLTAGE RELAY WITH DIGITAL DISPLAY

The relay is designed to control AC or DC voltage in an electrical network. It is used in the schemes of relay protection and automation of power systems, alternative energy, power input devices for the protection of industrial equipment and home appliances

Product's features

Determination of the RMS value of the voltage produced with high precision, by repeatedly measuring the voltage during each period of the mains voltage and mathematical treatment of the results in real time.

- Digital display of the measured voltage
- Galvanically isolated output contacts. One normally open and one normally closed contacts are galvanically isolated
- Programmable values for the upper and lower threshold voltage operation
- Programmable limits and settings using the buttons and the 4-digit digital display
- Does not require auxiliary power supply (powered by the monitored line)
- The relay is created to cover a wide range of controlled AC and DC voltages
- Mounting on DIN-rail, modern design





DIGITAL INDICATORS

Digital indicators are designed to measure the value of the existing high-voltage electrical AC circuits, when applying for measuring input voltage from the measurement of high voltage transformer

Technical characteristics

- Voltage indication and current via the 3-, 4-digit digital display.
- Galvanic isolation between the input supply and measuring input.
- Fastening the front panel from the rear accession conclusions.
- RMS voltage is determined by the multiple voltage and mathematical processing of results in real time.
- External voltage transformer.
- Power supply AC or DC (100-265)

TIME RELAYS

Daily relay is intended for control of electric devices and allows you to automatically turn on and off load at the right time, once every 24 hours.

Weekly relay allows you to automatically turn on and off load at the right time, with the day of the week, with a repetition period is 1 week.

Annual relay is intended for lighting control. The relay enables automatic correction on / off time in accordance with the values established by the manufacturer.

Automatic correction is carried out daily, in accordance with the values of on / off time, recorded in the memory of the relay.

- The values of on / off time can be set:
- in accordance with the time of sunrise and sunset for the geographic longitude and latitude of the locality in which it is planned to use the relay
- in accordance with the individual schedule of the Customer



MIKROTERM LTD

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	Web	
Ş	Director Mr. Victor Riabchenko, Director	 Contact Ms. Valentina Tsikuntsova, Head of the Marketing Department Phone

General information

Products
Range of applications
Main export markets
Founded in

The basic direction of the enterprise activity is the development of engineering documentation and manufacturing of the control and regulation devices of technological processes in different branches of industry: to measure temperature, pressure and level, as well as production of a wide range of pneumatic-electric and electric pneumatic devices, safety barriers, paperless recorders, digital indicators and other devices

INTRINSIC SAFETY BARRIER MTM501

<u>Д</u> Микроlерм

Intrinsic Safety Barriers are designed to power supply of current loop transducers located in dangerously explosive zone (active input) or signal reproduction of DC current in ranges 0..5 mA, 0..20 mA, 4..20 mA (passive input) to output signals of DC current in ranges 0..5 mA, 0..20 mA, 4..20 mA in any combination

Technical characteristics

- Certifications/Compliance "ExialIC"
- Isolation between inputs and outputs 1500VRMS
- Isolation between inputs 500VRMS (for MTM501-072, MTM501-092).
- Isolation between outputs 500VRMS (for MTM501-082)
- RS485 (MODBUS-RTU Slave) for MTM501-09, -092



PAPERLESS INDUSTRIAL RECORDER MTM-RE-160-MK10

Industrial Recorder is designed for measuring of electrical signals of DC voltage, DC current, signals of thermocouples (TC) and signals of resistance temperature detectors (RTD); recording of information about the technological process in nonvolatile memory; storage and displaying of given information

Technical characteristics

- Certifications/Compliance "ExialIC"
- Period of recording in a range 1 sec, 2 sec, 10 sec, 40 sec
- Internal memory up to 8 GB (up to 290 days of recording)
- Mathematical channels, free programming logic of digital outputs
 Displaying on the TFT display up to 12 free configurable screen views
- (curve or histogram or digital representation of parameters)
- RS232, RS485 (MODBUS-RTU), Ethernet (MODBUS-TCPIP, WEB-server), USB
- Software for printing and viewing of charts and parameters on Personal Computer is included



PRESSURE MEASURING TRANSDUCER MTM701.7

Transducers provides continious measurement of gauge and differential pressure of gas and liquid media.

Technical characteristics

- Intrinsic safe (ExialIC) executions
- Adjastment of the convertion range within working range of pressure sensor
- Linear output conformity
- Output signal 4...20 mA (in two-wire system)
- Output signal 0...5 mA or 4...20 mA (in three-wire system without intrinsic safety)

MEASURING TRANSDUCER (PID-REGULATOR) MTM402P

PID-regulator is designed for measurement and PID-regulation of technological parameter; displaing of the value of the measured parameter (green indicator) and the set position or the output value of regulator (red indicator). The main area of application of the device is local systems of control and regulation of technological processes

Technical characteristics

- Certifications/Compliance "ExialIC"
- Sensor of the temperature for compensation of temperature of "cold end" of thermocouples
- 2-, 3-, 4-wire connection of RTD sensors
- Detection of TC and RTD circuits break
- Build-in power supply for current loop industrial transducers 19 V 22 mA
- PID regulation: analog regulation, pulse regulation, PWM regulation
- RS485 (MODBUS-RTU Slave)



CALIBRATOR MTM1000M

Calibrator is designed for measuring and reproducing of electrical signals of DC voltage, DC current, resistance; as well as measuring and reproducing of electrical signals of thermocouples (TC), signals of resistance temperature detectors (RTD) with representation of the results directly in degrees Celsius or Fahrenheit.

The main area of application – the original or working standard for calibration of measuring devices in laboratory and industrial conditions

Technical characteristics

- Two isolated channels: measure, source and view process signals simultaneously
- Measure mV, V, mA, thermocouples, RTDs and resistance to test sensors and transmitters
- Source/simulate mV, V, mA, thermocouples, RTDs and resistance to calibrate transmitters
- Sensor of the temperature for compensation of temperature of "cold end" of thermocouples



MICROL LTD

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	Web	
Ş	CEO Mr. Bohdan Demchyna, Director 🔗	Contact Natalia Polishchuk, Head of the Department Phone +38 (0342) 502-701; +38 (067) 359-70-90; +38 (095) 092-07-28; +38 (0342) 502-702 E-mail

General information

	Products Programmable Logic Controllers, Microprocessor Regulators, Counters, Timers, Tachometers, Flow meters, I/O Modules, Process Indicators, Hand Control Station, GSM - Routers, Process Signaling Devices, Galvanic Isolation Devices, Signal Converter, Interface Signal Converter
	Range of applications Metallurgy, energy, chemistry, oil and gas, food, agricultural, housing
	Main export markets
	Founded in
$\mathbf{\nabla}$	Awards



Production of Programmable Logic Controllers etc.

GSM - ROUTERS SQUID

GSM-router SQUID is a communication device for the implementation of wireless data collection, management and communication of information using packet data GPRS (3G) in cellular networks of standard GSM. It is widely used in industrial automation systems, automated monitoring systems and the account of power, telemetry and remote control systems, control systems and in dispatching and other systems and data collection

Technical characteristics

- Analog and discrete inputs and outputs
- Data transmission over the Internet without modems or servers
- Archiving for Micro-SD. Real time clock
- Receiving, sending SMS, control via SMS
- Language ST. Programming Logic user
- USB port. Setting up and monitoring
- RS-485 interface

22

- Power - ~120/220 Vac or =24 Vdc





Technical characteristics

- RS-485 interface. Protocol Modbus RTU
- Information exchange with PLC, PC or HMI, via RS-485 or Ethernet or GSM
- Discrete IO modules 8 and 16 channels

REMOTE INPUT OUTPUT INTERFACE MODULE RIO

Model Remote IO is designed to create a rational system of distributed control and management of technological objects. Ultracompact design module makes it possible to install them in remote locations directly at the equipment and mechanisms, which saves time and reduces the cost of implementation. Modules are used in intelligent IO, in which each module has a built-in microprocessor that performs the tasks and functions for signal processing, regardless of the central controller (PLC), computer (PC) or operator panel (HMI)

- Analog IO modules 4, 6 and 8 channels
- Specialized modules tachometers and regulators
- Status indication modules
- Power ~120/220 Vac or =12-24 Vdc
- Mounting on DIN-rail



MICROPROCESSOR INDICATOR ITM-115

Microprocessor-based indicator is designed to measure the physical parameters of the input, processing, converting and displaying its current value on the digital display and analogue linear scale (in %). It is designed for stand-alone and integrated use in automation systems for measuring, signalling, blocking and defence technological equipment

Technical characteristics

- Working with a wide range of various sensors
- Transmission (transfer) analog input to analog output
- Discrete control actuators. Technological and alarm
- RS-485 interface. Protocol Modbus RTU
- Power ~ 120 / 220Vac or = 24Vdc

MICROPROCESSOR REGULATOR MIC-127

The controller allows the user to use the power of software controller with a minimum number of inputs and output signals. System programming language based on function blocks FBD with a large library of ready solutions makes it possible to set up a regulator MIC-127 to any process control, regulation and control, of varying complexity

Technical characteristics

- Universal inputs for connecting different types of sensors
- Types of regulation P, I, PD, PID. Types of controllers analogue, pulse, cascading
- High precision regulation. Technological and alarm, lock and others.
- The implementation of individual schemes of regulation. Logical, mathematical processing
- RS-485 interface. Protocol Modbus RTU
- Power ~ 120 / 220 Vac or = 24 Vdc



23

MICROPROCESSOR CONTROLLER PLC MIC-53N



PLC MIC-53N microprocessor controller with integrated discrete and analogue inputs / outputsis designed to implement mathematical and logical operations, regulation and control of technological parameters of small and medium complexity

- Discrete and analog inputs and outputs
- Functional blocks FBD. High speed of operation
- Real time clock. Installation on DIN rail
- Temperature range: from -40 to +70
- Power ~ 120 / 220 Vac or = 24 Vdc

TELETEC LLC



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	Web	
8	CEO Mr. Miroslav Dodonov, Pirector	Contact Mr. Vladimir Lutsenko, Chief of the Department Phone

General information

Ø	Products MTX1 smart single phase power meter; MTX3 smart three phase power MTX RT Data concentrater-router Unit; Embedded MTX IU Interface Units RF, GSM/GPRS, RS485, M-Bus; MATRIX AMM Application So	
Ø	Range of applications Power Generation, Transmission, Distribution utility, Construct Municipal, Industry, Renewable Energy Gener	
	Main export markets Belarus, Kazakhstan,Uzbekistan (power metering solution Germany, USA, Russia, etc. (Worldwide, IPTV/OTT Solution)	
	e	Founded in
		Certificates in use
		Benefits Complete Product Cycle (Development, Manufacturing, Sales, Service, Support), Printed Boards SMT automatic Assambly Lines, Printed Board Wave Flow soldering line, SKD Assembly Lines, Power Meter Calibration Department Product Functional and QC Testing Department



24

MTX3 SMART THREE PHASE POWER METER

MTX3 active and reactive energy one- or bidirectional metering solid-state smart meter for utilities, industry, residential.

MTX3 works with MATRIX AMM, other AMM (after integration) or stand-alone. Highest and anti-fraud functionality. Available for renewal energy generation (solar, wind). Conformity to International Standards. Competitive price

- 100-380 V, 5-120 A
- LCD display
- One or Bidirectional Active & Reactive
- Energy meteringBuild-in PLC, RF, GSM/GPRS, RS485 interface units
- Build-in load management contactor (only for DC connection)
- Anti-fraud functionality, IEC61000 standard conformity
- Time of Use (ToU) functionality - Prepayment functionality
- Metering Data reading & Parameters loading Password Access, AES128 conformity
- Work conditions: _ Temperature range: -30 °C +70 °C Life term: 24 years Warranty term: 5 years Next Calibration term: 16 years (Ukrainian local market)



MTX1 SMART SINGLE PHASE POWER METER

MTX1 active energy one- or bidirectional metering solid-state residential smart meter. MTX1 works with MATRIX AMM, other AMM (after integration) or stand-alone. Highest anti-fraud functionality. Available for residential renewal energy generation (solar roof, wind). Conformity to International Standards. Competitive price

data

Technical characteristics

- 220 V, 5-100 A
- LCD display
- One or Bidirectional Active Energy metering
- Build-in PLC, RF, GSM/GPRS, RS485 interface units
- Build-in load management contactorAnti-fraud functionality, IEC61000

MULTI

interface

- standard conformity - Time of Use (ToU) functionality
- Prepayment functionality
- Metering Data reading & Parameters loading Password Access, AES128 conformity
- Work condition:
 Temperature range: -30 °C +70 °C
 Life term: 24 years
 Warranty term: 5 years
 Next Calibration term: 16 years
 (Ukraine local market)

Wide variety of MATRIX AMM's interface units provide interactivity, reliable metering

configuration. Communication modules consist of MTX meter's embedded

interface units and external interface units for power, water, gas & heat meters

command

device

collection, control

transmission and remote

EMBEDDED MTX IU INTERFACE UNITSI PLC, RF, GSM/GPRS, RS485, M-BUS

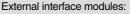
Technical characteristics

MTX meter's embedded modules:

- GSM/GPRS
- RF 868 MHz
- PLC Teletec
- PRIME PLC OFDM
- RS485 module

MATRIX AMM APPLICATION SOFTWARE

Designed for data collection, processing, analysis from meters MTX, MTX IU interface modules, MTX RT DCU, device control, devices configure remotely or on-site



- RF 868 MHz for power meter's pulse output reading
- RF 868 MHz gas meter's pulse output reading
- RF 868 MHz for water meter's pulse output reading and valve control option
- M-BUS for electronic heat meter's reading

Technical characteristics

- Multilingual GUI (Graphic User Interface)
- Cross-platform support
- Adjustable report- type manager
- Large number (up to 100 K) Devices Data Storage and processing
- Scaling
- Multi-user and user-friendly interface with configurable User Access and Accounts Administration
- Daily/monthly consumption, load profile, max demand and balance groups reports
- Data exchange and synchronization with external AMI/AMR/AMM, Billing, ERP, CRM systems
 - Standard data import-export format files (xls, xml, csv, html, json)



MTX RT DATA CONCENTRATOR-ROUTER UNIT (DCU)

MTX RT is designed for data exchange & storage from MATRIX AMM components (meters, interface modules),control command & parameter settings transit

Technical characteristics

- Metering Data collection and storage in depth 45-180 days
- Remote parameters setting and firmware update
- PLC, RS-485, RF two-way meter-DCU communication
- Ethernet, GSM/GPRS, CDMA uplink interfaces
- Autonomous automatic operations. No need of constant server control
- SD-Card, USB standard external interfaces support
- Open and easy integrable API using standard file formats and communication protocols (TCP/IP, HTTP, JSON, XML.)
- External reserve power supply
- Vandal-resistant, IP68 enclosure

SPARING-VIST CENTER, SPPE, PE



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	Web	
?	CEO Mr. Rostyslav Smuk, Founder & CEO	ontact <t< th=""></t<>

General information

\sim	Products	Radiation measurement instruments and systems of "ECOTEST" trademark
	Range of applications	Customs and Border Services; Law enforcement agencies; Emergency Services and Civil Defense; Industry; Sanitary dosimetry and ecology; Medicine Educational programs; Household use
8	Main export markets	CIS, Europe, Asia, Africa, Australia, North and Latin America
H	Founded in	
		Certificates in use The company has all certificates, permits and licenses necessary for operation in the field of instrument engineering. CE
		Awards "Industry sector Leader"; "No. 1 Exporter of the Year in Ukraine"
		Benefits



We offer full range comprehensive solutions including personal, hand-held, transportable devices as well as fixed systems designed to solve diverse measurement problems. The majority of our products have been certified and included in the State Register for Measuring Instruments of Ukraine and other countries of the world

Creation of innovative products with wireless communication technologies

Development of high-tech and ergonomic engineering solutions.



IT-09T data panel

26

Displays information about ambient dose equivalent rate of gamma radiation, real time and temperature. The data is communicated from the BDBG-09 detecting unit of gamma radiation, which is included in the delivery kit. IT-09T data panel together with the BDBG-09 detecting unit and RadMonitor software allow creating an automated system for continuous monitoring of background radiation.

The panel with the units can be placed outside as well as inside for a comprehensive control of the facilities. The distance between the data panel and the unit can reach 50m. All data is continuously transmitted to a personal computer that allows central monitoring of all objects

SPECTRA search dosimeter-radiometer MKS-11GN

"SPECTRA" search dosimeter-radiometer is designed to detect, localize and identify radioactive and nuclear materials of gamma and neutron radiation for prevention of their illicit trafficking, as well as at enterprises and organizations handling gamma and neutron radiation sources

Purpose of use:

- Measurement of gamma and X-ray radiation ambient dose equivalent rate (photon-ionizing radiation DER).
- Determination of neutron radiation intensity.
- Identification of radionuclide type.
- Accumulation, storage of amplitude gamma spectra in the nonvolatile memory and their identification



27

ECANTEST VALUE DR DALLE DR DAL

DKG-21M personal gamma radiation dosimeter

Direct reading personal dosimeter in a damp and dustproof body with a high ingress protection rating, designed for use by the Army, Ministry of Emergencies and Civil Defense in conditions of significant temperature oscillations and high dustiness of atmosphere.

It can be used either independently or within the automated system of personal dosimetry control.

The dosimeter allows storing dose accumulation history with real time reference in the non-volatile memory, and communicating it to the computer. If the programmed threshold levels of gamma dose or its rate are exceeded, light and audio alarms are actuated

TERRA dosimeter-radiometer MKS-05

A top famous product of "ECOTEST" trademark, which is exported to over 70 countries. This is a professional device for official measurements, which measures the level of gamma background, beta contamination, accumulated dose and its accumulation time. Prompt evaluation of gamma background is performed within 10 seconds. With the help of GS Ecotest application measurement results are transferred to smartphones and tablets running Android[™] OS via Bluetooth channel in real time. The GS Ecotest application is available on Google Play





VIRTUOSO multipurpose environment activity radiometer RKG-14

VIRTUOSO is a compact-size device for comprehensive radiological examination of food, soil, construction materials, etc. It can be used for official measurements for environmental studies, radiological control of agricultural products, in construction, mining, logging and woodworking industries, as well as for educational programs.

The device is designed to detect cesium radioisotopes and naturally occurring radioactive materials (potassium, radium, thorium), as well as to assess their specific, volume and surface activity.

Due to the use of the brand new technology, you can now control cesium radioisotopes and naturally occurring radioactive materials not only in specialized laboratories, but at home without help of professional radiologists

POSITRON GMBH LTD



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			www.positron.dp.ua
2	CEO Mr. Sergey Zonov, Director	8	Contact

General information

	Products Dosimeters, radiometers, detectors, analyzers, detection units, radiation monitors, pump units											
R	Range of applications Nuclear industry, the checkpoints on the state border, in scientific research, medicine, and environmental monitoring											
	Main export markets	Bulgaria, Estonia, India, Kazakhstan, Lithuania, Russia										
	Founded in											
		Certificates in use ISO 9001: 2009; UA 2.002.08851-15 from 09.02.2015										
	Ø	Awards The Diploma of the International exhibition "Nuclear industry", The Diploma of the International exhibition-fair of industrial technologies, means of production, the goods and services of the CIS countries										
		Benefits Positron GmbH develops and produces, updates and improves, markets and more new systems and devices										



28

RADIOMETER RZBA-04-04M

Radiometer surface contamination of alpha-and beta-active substances RZBA-04-04M is designed to measure contamination of surfaces (skin or clothing of staff) of beta-and alpha-active substances (in flux density of alpha and beta particles incident the input window of detection units) and signaling of excess (or not exceeded) established thresholds

Technical characteristics

 The range of flux density measurement of beta particles

 - from the surface, min⁻¹-cm⁻²;

 - in the energy range of beta particles, MeV

 - mathematical measuring range of law density of alpha particles from the surface, min⁻¹-cm⁻²

 - from 0,15 to 2,5

 Measuring range of flux density of alpha particles from the surface, min⁻¹-cm⁻²

 - from 0,1 to 10000

 in the energy range of alpha particles, MeV

 - from 4,13 to 5,6

 Thresholds alarms are set individually for each measuring channel, min⁻¹-cm⁻²:

 - for the detection unit BDZA within the limits;

 - for the detection unit BDZB within the limits.

 - for onthe detection unit BDZB within the limits.

 - from 5 to 9999

 Time of continuous work, hours per day.

 - no limit

 Average lifetime no less, years.

DOSIMETER-RADIOMETER MKS-2001

Dosimeter-radiometer MKS-2001 is multifunctional stationary device with digital display readings, microprocessor control and the ability to connect exchangeable. It is used for radiation monitoring in institutions where the works with radioactive materials and other radiation-dangerous sources of ionizing radiation

Dosimeter-radiometer provides a setting of two thresholds of the alarm - a warning threshold and an emergency threshold. Threshold alarm is indicated by elements of light and sound alarm. Light and sound alarm threshold is made to display the elements of green, yellow, red and sound alarm installed on the unit of measurement BOI-12

Technical characteristics

	Range of registered energies for the gamma radiation, MeV 0,053,0
BDMG-04	Range of measuring power for the gamma radiation equivalent dose, Sv/h. 0,05*10-610,0
	Range of registered energies for the gamma radiation, MeV
BDMG -101	Range of measuring power for the gamma radiation equivalent dose, Sv/h. 0,05*10-4200
BDMN	Range of registered energies for the gamma radiation, MeV
	Range of measuring power for the equivalent dose of the neutron radiation, $\mu Sv/hmSv/h$ 0,1100
UDZHG-01-01	Range of measuring volumetric activity of gamma radiation nuclides in fluid, Bq/m ³
UDZHG-01	Диапазон измерения объемной активности нуклидов жидкости, Бк*м ³ (Ки*л ⁻¹)
UDGB-01	Range of measuring volumetric activity of inert radioactive gas, Bq*m ³
UDGB-01-01	Range of measuring volumetric activity of gamma radiation nuclides in fluid, Bq/m ³

RADIATION MONITOR MPS-01 "KORDON MN"

Monitors radiation MPS-01 "KORDON-MN" is intended for the continuous measuring of level of radiation from the controlled object, comparison of the measured values with the level of base-line radiation, to signaling about exceeding of the measured values above a background. Registration and analysis of ionizing radiation in a monitor is carried out the method of comparison of radiation from the controlled object with the level of base-line radiation in the place of location of monitor without the direct measuring of numeral value.

The monitor is used on the checkpoints for different purposes: road, rail and pedestrian border crossing points, crossing points of nuclear power plants, the nuclear-industrial complex of metallurgical enterprises, mining, processing and storage of radioactive and nuclear materials processing facilities and storage of radioactive waste, government agencies, banks, offices, etc.

Detection thresholds of gamma-radiation source activities at the control of rail transport									
Gamma source activity, at least, kBq									
americium-241 (241Am) barium-133 (133Ba) cesium-137 (137Cs) cobalt-60 (60Co) thorium-228(228Th									
60000 350 600 340 200									
The width of passage between the radiation panels 6.2 m, height 4 m above the railroad tracks, the speed of traffic does not avoid 25 + 2 km/h. The probability of detection these values at least 0.5 with 85% containty.									

Detection thresholds of gamma-radiation source activities at the control of road transport									
Gamma source activity, at least, kBq									
americium-241 (241Am) barium-133 (133Ba) cesium-137 (137Cs) cobalt-60 (60Co) thorium-228(228Th									
2000 95 170 90 60									
The width of passage between the radiation panels 6 m, height 3.5 m above ground level, the speed of traffic									

is not more than 10 ± 2 km / h. The probability of detecting these values at least 0.5 with 95% certainty

Other

Monitors continuous operation time, running on AC power, at least 24 hours a day, with autonomous battery power - at least 8 hours.

Environment temperature, °C

- for the detection units

- for the measurement unit and power supply from +5 to +50



DETECTION UNITS BDMG-04

Detection units BDMG-04 are intended for measuring of power of the equivalent dose of a gamma radiation and for measurement of power of the absorbed dose of gamma radiation in air. The detection units concern to stationary resorts of measuring technics, which are applied to the control of radiative conditions

Technical characteristics

Range of logged energies of a gamma-rays from 0,05 to 3,0 MeV





SEMPAL LLC



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	Address
Â	Phone
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	E-mail
8	CEO Mr. Semen Pokras, CEO
	General information
	Products
Ø	Range of applications Residential houses; administrative and office buildings; schools, hospitals; industrial companies; water and heat stations; water and heat systems, plants
8	Main export markets Belarus, Brazil, Kazakhstan, Kyrgyzstan, Moldova, Russia, UAE, Uzbekistan
	👜 Founded in
	Certificates in use Certificate TUV_Rheinland ISO 9001-2008; ISO 14001-2004; OHSAS 18001-2007 Certificates DEKRA ISO 9001-2008; ISO 14001-2004; OHSAS 18001-2007 Awards Gold Medal of Foundation "Excellence in Business Practice",
	Geneva, Switzerland; Gold Award "Business Initiative Directions", New York, USA; Mark of Quality Conformance to Requirements of Total Quality Management QC100, New York, USA
-	Design, engineering, manufacturing, configuration of devices and equipment according to customer requirements, sales, service of heat meters, water meters, temperature controllers,
10-1	flow meters, subassemblies
	 INM (MI) INM (M2) ITI
NC.	



S-10F ULTRASONIC WATER METERS S-10H ULTRASONIC HEAT METERS

Equipment is used for:

- water volume and mass, temperature and pressure measurement heat measurement
- S-10F and S-10H ultrasonic heat and water meters consist of:
- 20 to 1200-mm diameter stainless steel metering section
- stainless steel flanges
- IP65-class protection metal case
- high-strength titanium ultrasonic flow sensors
- cable length is up to 100 m;
- temperature detectors

Technical data

Water temperature.								up to 150 °C;
Minimum flow rate								. of 0.015 m3 / h;
Nominal flow rate .			•		•		•	of 1.5 m3 / h.

- The pressure loss of 0.09 bar at the nominal flow rate of 1.5 m3 / hr (in accordance with EN1434)
- 1 or 2 accuracy class (OIML R49) upon customer's request
- B C climatic environment class (OIML R49)
- Can be used in heating, cooling and hot water system

Other

- Impacts resistance
- Insensitivity to magnetic field
- Can use batteries as well as electrical network power
- Flow sensors can be installed in flooded areas
- Sensors can be replaced without stopping water flow



31



S-14F ULTRASONIC WATER METERS S-14H ULTRASONIC HEAT METERS

Equipment is used for:

SELF

- water volume and mass, temperature and pressure measurement
- S-14F and S-14H ultrasonic heat and water meters consist of:
- 15 to 20-mm diameter brass metering section
- IP65-class protection case
- high-strength titanium ultrasonic flow sensors
- 12 year battery lifetime

Technical data

- Medium temperature range 0 ... 130 °C
- The max measurement range Flow 200:1
- The self-controlling system
- DN 20, G3 / 4B threaded connection
- 2 accuracy class (OIML R49)
- B C climatic environment class (OIML R49)

Elvatech

ELVATECH LTD

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	Web	
?	CEO Mr. Alexander Filippov, Director	ContactMr. Maxim Pushnoy, Sales DepartmentPhone+380 (44) 599-11-43E-mailsales@elvatech.comLanguagesEnglish, Russian

General information

	Products
Ø	Range of applications Wide range of analyzed materials: metal alloys, jewelry, RoHS, petrochemicals, ores and minerals, catalytic converters, cement, ceramics, soils, sewage water, pictures and other art objects
	Main export markets
	Founded in
	Certificates in use



Elvatech Ltd. is one of the five main global producers of handheld XRF analyzers.

Our company is an R&D enterprise based in Kiev, Ukraine. Since 1991 it has been engaged in scientific instrument-making specializing in design and manufacture of electronic, vacuum, and spectrometric equipment, automated data collection and processing systems, and analytical software. Its products are used in industrial, research and academic laboratories worldwide

HANDHELD XRF ANALYZER PROSPECTOR

Powerful handheld analyzer employing the latest developments in XRF analysis. Due to the advanced electronics and state-of-the-art mathematical algorithms.

ProSpector provides ultimate quality of measurement within a couple of seconds. It is an intuitive and user friendly instrument for highly accurate elemental analysis in a variety of applications

Technical characteristics

- Detection range from CI to U or from Mg to U
- Si-PIN, SDD, or Fast SDD detector
- Low detection limits

- Over 8 hours operation from the battery
- Alloy grade library containing 300+ alloys, completely editable
- High stability. No need for calibration by user
- Radiation safety: proximity sensor, low count rate detection





DESKTOP XRF ANALYZER ELVAX

The instrument is designed for highly accurate elemental analysis in a variety of applications. The majority of analytical tasks do not require any sample preparation. Helium purge of the analytical chamber ensures minimal limits of detection of the light elements (Mg in Al alloys from 0,1%, Al in Ti alloys <0,1%, Si in steel <0,05%, P in steel \approx 0,01%). CCD camera ensures precise positioning of the analyzed sample

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33

Technical characteristics

- Detection range from CI to U or from Na to U
- Si-PIN, SDD, or Fast SDD detector
- Powerful and intuitive software
- Automatic sample changer
- He purge of the analytical chamber

DESKTOP XRF ANALYZER JEWELRY LAB

ElvaX Jewelry Lab was designed for high-accuracy analysis of precious metals and jewellery. Measurement process takes only several seconds; result is shown in % and karats. ElvaX Jewelry Lab is also capable of detecting coatings and nonstandard alloys. The instrument has embedded scales, embedded printer, CCD camera, automatic collimator changer, Pb glass lid

Technical characteristics

- \bullet Detection range from CI to U or from Mg to U.
- Si-PIN, SDD, or Fast SDD detector.
- Powerful and intuitive software
- Automatic collimator changer
- Scales
- Printer
- CCD camera
- Pb glass lid



800mm² spot PORTABLE XRF ANALYZER ELVAX MOBILE

Portable EDXRF analyzer for testing a wide variety of materials. The sampling tray, similar to a benchtop instrument, allows the convenient placement of XRF sample cups. The high resolution SDD detector and absence of collimators ensures a high count rate, crucial for quick detection of trace elements. The ElvaX Mobile analyzer is indispensable for testing soil and petrochemicals, or for any other applications where testing liquids and powders are required on site.

Technical characteristics

- Detection range from CI to U or from Mg to U
- Si-PIN, SDD, or Fast SDD detector
- Analysis of liquid and powder samples in the field

HANDHELD XRF ANALYZER ELVAX GEO

Handheld XRF spectrometer is designed specifically for use in geo-exploration. Its specialization is XRF screening of inhomogeneous geological objects (ores, rocks, soil) without sample preparation. This is realized via enlarged measurement spot (up to 800 mm²), which increases screening representation and reliability. ElvaXGEO is powered by a Li-ion battery providing 8 hours of autonomous operation.

- Detection range from CI to U
- SDD detector
- Enlarged measurement spot (800 mm²)
- Pole for analysis in hard-to-reach places



RADMIR COMPANY

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Web	www.radmir.kharkov.com
	Mr. Sergey Lytvynenko, Director

General information

	Products
R	Range of applications
	Main export markets
	Founded in
	Certificates in use
2	Awards
	Benefits



Development, production and supply of sophisticated medical equipment

34

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ULTRASOUND SCANNERS ULTIMA SERIES

The universal diagnostic scanner for diagnosis in medicine. The presence of share wave elastography for the diagnosis hepatitis at an early stage and for the diagnosis cancer diseases

Technical characteristics

- Expert-class digital ultrasound scanner with color Doppler
- Scanning depth up to 40 cm
- Electrical power supply 220 V, 50 Hz





DIGITAL MAMMOGRAPHY SYSTEM MADIS

The apparatus for diagnosing breast diseases with the filter for intellectual image processing

2

1

92 90 00 8 lines

per mm

35

Technical characteristics

- Resolution 7 line pairs per mm
- Electrical power supply 220 V 50 Hz

DIGITAL MAMMOGRAPHY SYSTEM SYMA

The apparatus for diagnosing breast diseases with the filter for intellectual image processing

Technical characteristics

- Resolution 8 line pairs per mm

- Electrical power supply 220 V 50 Hz

UKRSPETSTECHNIKA UKRSPETSTECHNIKA, HC, PJSC

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?	CEO Ms. Vera Koshevaya, Chairlady of the Board	Contact Mr. Mikhail Prohorenko, Deputy Chairman of the Board for Commercial Affairs Phone

General information

	Products	. Input-output devices for industrial automation: analog iput-output modules, discrete input-output modules, galvanic isolation, interface converters
\bigcirc	Range of applications	Industrial automation, scientific research, special automation tasks, educational boards
	Main export markets	
	e	Founded in
	Q	Certificates in use
	e	Benefits Our experts carry out research and development projects to create special equipment and specialized components. Applying state-of-art technology of radar signals allowed creating new units of special equipment. The company is currently developing automatic system of warfare theater control. The system will integrate actions of Air Defense Forces, Air Forces and Navy while patrolling and solving air defense objectives of the state

oint Stock Company "Holding Company "Ukrspetstechnika"" has been operating in the telecom and electronic technology market since 1989. Our professionals' expertise, creativity and talent enabled us to win one of the leading positions in Ukraine in the segment of design, development and manufacturing a wide range of sophisticated electronic, military and special purpose equipment.

> The main fields of operations of our holding company include R&D, manufacture, supply, installation and maintenance of special purpose electronic equipment, hi-tech and state-of-art weapons and means of telecommunication

36

RADAR "BARSUK"

"Barsuk" is a patrol portable radar that provides detection of people, surface land and sea vehicles. It can be used to provide security of land and sea areas of the state borders, for the protection of military, administrative and service buildings (warehouses, nuclear power plants, residences of important people, etc.) in all weather conditions in the absence of optical visibility. The ilnformation about a moving target is displayed as signal amplitude (target identification – a person, a group of persons, a vehicle, an animal and- is carried out via sound channel with headphones).

Continuous wave radar transmitters allow the use of very low power radiation, making them difficult to detect, and the use of code manipulations make radar immune to interference and do not interfere with other radio equipment.

A small radar weight (5-6 kg with battery power) allows the operator to wear it on his chest and examine the field of view by rotating its body. The instantaneous field of view of the radar corresponds to a field of view of the human eye. Radar is useful when searching for and prosecuting violators patrol in the absence of an optical visibility.

Technical characteristics

-	Frequency	1.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	36 GH2	Z
	Detection																								
	person																							1200 m	۱
	vehicle																							3000 m	า
	watercraft																							1200 m	า
-	Resolution	ı:																							
	azimuth .																							3	0
	range																					2	25	m, 50 m	า

ransmitted power 0.075 W	
ecognition mode by operator with headphones	
epresentation LCD display	
/eight	
zimuth view sector	
perating temperature	
altage 12 V	

display

MOBILE COMPLEX OF SURFACE RECOGNITION AND ECM "JAB"

A mobile complex of surface reconnaissance and ECM "JAB" is intended for detection, classification and identification of surface moving targets as well as low-speed low-flying air targets, target pointing with the aim to provide performance of tasks on security of wide areas and reconnaissance.

The complex provides:

- automatic detection (with radar) and receiving detail information (with visual channel) about surface moving targets geographically referenced and with output of the information to command centre;
- automatic affixment of the complex on the terrain with the help of satellite navigation systems; calculation and record route traffic at PC

Technical characteristics

-	Radar de	ete	ect	tio	n	ra	In	ge):						
	person.													. 2.5 k	m
	vehicle .													. 6.4 k	m
-	IR chann	nel	d	et	e	cti	or	۱r	ar	١g	e:				
	person.													. 2.4 k	m
	vehicle .														

- Ti - R - R - W - A - O

RADAR "LIS-2M"

It can be used to provide security of land and sea areas of the state borders, for the protection of military, administrative and service buildings (warehouses, nuclear power plants, residences of important people, etc.) in all weather conditions in the absence of optical visibility.

Detection and identification of the target is carried out in the automatic mode. The mark of the target is displayed at the same time on the screen of the portable computer the data of which are automatically stored in the log with the number, range, azimuth, speed and signature with reference to a map. Also it is possible to unite multiple radars in one system connected with TV and IR cameras for identification of detected targets.

Technical characteristics

- Transmitted power				1W
- Recognition mode				. Automatic
- Representation				PC
- Weight				40 kg
- Azimuth view sector .				360°
- Operating temperature				30°…+50 °C
-Voltage				12 V



360°

view

ORIZON-NAVIGATION, SE

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¢	CEO Mr. Viktor Maistruk, Director 🔌	Contact Mr. Andrii Kryvoviaz, Chief of Department of Marketing Researches Phone

General information

Products Satellite navigation equipment GPS/GLONASS for ground, marine and aviation applications									
Range of applications Ground moving objects of military equipment, the civil and military airplanes and helicopters, the marine ships, the railway transport; the application of satellite navigation technology for solving specific tasks in hard external environments									
Main export markets									
Founded in									
	Certificates in use ISO 9001: 2008 № 15.346.180 of 30th April, 2015 Production approval certificate CB № 0017 of 01.04.2013								
Ø	Awards								
	Benefits								

Designing and manufacturing of equipment for users of satellite navigation systems GPS/GLONASS for high-accuracy positioning, time and speed that meets the latest advances in GPS- technology is the main field of scientific and technological activity of SE "Orizon-Navigation"

CH-3210

38

Navigation system of survey and time provision is mounted in dedicated ground facilities and intended for the following problem solving:

- determination of on-line navigation parameters of objects and current time;
 displaying the navigation parameters of objects on the digital ground chart;
- integrated processing of navigation and cartographic information;

VIGATION

- maneuver planning and remote monitoring of object maneuver execution;
- on-line navigation information exchange with interacting objects;
- initiation, storage and displaying the chart in selected scale (from 1:100 to 1:5000000);
- displaying, registration and control of objects on the chart of selected scale;
- elaboration of differential information at control and correction station (CCS) operation.

Technical characteristics

0+3210	АВК
CHARW CHARW	
with the total total and the total states and total states	CERTAR DER TECT
- Produced	
-	
o there	
	24
	channels
Other	

For land-based mobile and stationary objects

CH-4312

The equipment is intended for aircraft handling as a part of aircraft avionics system in all flight stages, including non-precision approaches, provides problem solving of navigation, planning, trajectory prediction, aircraft equipment control and air navigation process control using P-RNAV requirements with RNP 0.3, RNP 1, RNP 5 accuracy. Basic modes of navigation parameter determination: SNS, SNS SBAS, SNS GBAS, IS/ADS (Inertial System/ Air Data System), DME/DME, VOR/DME, provides a joint operation with user and aeronavigation by databases, automated control of interactive systems, performing of SID/STAR/APPROACH procedures, categories 1, APV2, APV1 landing in differential mode. The equipment meets the requirements of the following documents: KT-34-01 (class A1, B1, C1), TCO-C129A, KT-178B, 9613- AN/937, JAA TGL-10

Technical characteristics

Dimensions	RICU 181x87x252 mm
	UPS 160x173x52 mm
	AU according to ARINC 743A-4
Weight	RICU: no more than 2.5 kg
	UPS: no more than 1.1 kg
	AU: no more than 0.31 kg

CH-3307

The equipment is intended for interoperability with avionics of Su and MiG aircrafts in standalone and automatic modes, provides:

- standalone desired track flight execution and approach
- control from standard aircraft panel or from its own control unit
- input and storage of navigation database (WPTs, routes)
- on-line storage of the current parameters
- input of altitude and speed parameters
- input of flight direction parameters
- output of navigation data to standard indicating devices
- output of monitoring signals to ACS (Automatic Control System)
- output of digital information on standard interfaces ARINC 429 and RS-232
- output of information for navigation bombing execution

Technical characteristics

CH-3003M, CH-3003MH

Private use navigation receiver for severe operating conditions, provides automatic continuous setting of coordinates, speed and moving direction. It displays the current coordinates in systems of coordinates 1942, 1995, in worldwide ellipsoid of 1990, WGS-84, MGRS and UTM, line coordinates in Gauss chart projection, in system, parameters of which are specified by the user. For en-route traffic it provides input and storage of coordinates up to 500 WPT, memorization up to 50 routes (up to 50 WPT in each). CH-3003M identifies and displays an estimation of anticipated accuracy of coordinates. The new solution is a receiver CH - 3003MH with improved tactical and technical characteristics

Technical characteristics

CH-3003MH – 0,3 kg

Technical characteristics

Dimensi	on	s:		2	18	3x	19	1)	(57 mm
Weight:									2.0 kg

Other

For land-based mobile and stationary objects with the possibility of battery life



Other

Onboard aviation equipment.





ref for severe operating condition

. . . 10.5 kg Onboard aviation equipment

Other For land mo

For land mobile and for individual use



We

CH-4215 The equipment is designed for posi

The equipment is designed for positioning, ground speed and time for the radio signals of GLONASS and GPS function SBAS additions, as well as management problems and solutions service tasks of military units:

- operational definition of navigation parameters, speed, direction of the consumer movement, object orientation angles and the current time, asess the accuracy of determining the coordinates
- display of the current position in the system: WGS -84, -42 IC, PZ- 90.02, SC -95, UTM and MGRS, linear coordinates in the Gauss map, or in a system whose parameters are set by the operator
- display own position on a digital map
- introduction and storage routes (not less than 50 routes with 50 waypoints per route) in tabular and graphical form



UA TECHNOLOGY LTD

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General information

Range of applications 1. Aerial view of the earth's surface and control for intelligence, detection of moving and stationary objects (small targets). 2. The aviation tasks for jamming. 3. The aviation tasks for precise weapons.4. Military units movement control. 5. Support for special groups, carrying out operational activities. 6. Support for anti-terrorism tasks. 7. Control of military telecommunication networks. 8. Control of the environmental situation after strikes. 9. Patrolling of land and sea targets: monitoring and action. 10. Remote sensing of land for commercial purposes. 11. Cartography

Products

40

Benefits . . Unique domestic Ukrainian technologies, products and solutions in the field of design, development and manufacture of unmanned aircraft systems

> UA TECHNOLOGY offers unique models of unmanned aircraft systems of its own design in mini and tactical classes. All models have been tested under combat conditions and have successfully carried out reconnaissance missions for units of the National Police of Ukraine and the Main Intelligence Directorate of the Ministry of Defence of Ukraine



UAV UA-GAMA

UAV UA-gamma is designed for aerial photography, real-time video surveillance and patrolling of areas within a radius of 100 km

Technical characteristics

Takeoff weight, kg	
Payload, kg 6	Online video, km
The duration of the flight, hr 9	Operation speed, km / h
Range, km 800	Maximum altitude, m 5000

- Landing: patented parachute and pillow amortization or as an aircraft. Auto mode

- Channels: digital, protected video and command channels
- Antennas: high-precision automatic guidance system of receiving and transmitting antennas
- Start: Mechanical catapult, auto mode



UAV UA-beta is designed for aerial photography, real-time video surveillance and patrolling of areas within a radius of 30 $\rm km$

Technical characteristics

Takeoff weight, kg	
Payload, kg	Online video, km
The duration of the flight, hr 1,5	Operation speed, km /h
Range, km	Maximum altitude, m

- Start: Mechanical catapult, auto mode

- Landing: Patented parachute and pillow amortization or as an aircraft. Auto mode.

- Channels: Digital, protected video and command channels.
- Antennas: High-precision automatic guidance system of receiving and transmitting antennas

Advantages

Competitive advantages of the products are:

ability to operate in extremely difficult weather conditions (frost, snow, rain, strong wind), digital video and command channels, gyro-stabilization, high-precision automatic guidance system of receiving and transmitting antennas of own design.

All models are equipped with patented parachute and pillow amortization, which prevents damage of the aircraft during landing. Equipping of UAVs with such systems can reduce the costs of ongoing maintenance and repair and prolong the life cycle of UAV several times

DRONE.UA



42

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General information

	Products Unmanned aerial vehicles, sensors for drones, equipment for UAVs
\bigcirc	Range of applications Agriculture, GIS and topography, Energy, oil and gas industry, mining industry
	Main export markets
	Founded in
	Awards Winner of UNLIMIT UKRAINE by the European Business Association
	Benefits Advanced processing technologies of geospatial data and spectral information, using 3D printing technology

Drone.UA is a leading integrator of unmanned technologies in Ukraine. The company operates in agriculture, energy and oil and gas industries as well as in the fields of geodesy and topography. The key areas of Drone.UA application are development and implementation of industry solutions based on the technology of drones, offering UAVs services, and processing the data obtained by drones. Drone.UA aircrafts are used on more than 1.5 million hectares of sown areas of Ukraine



DRONE.UA PD1900

PD1900 – unmanned aircraft produced by Drone.UA. The platform is designed for obtaining high-resolution aerial photography data. UAV has excellent performance characteristics and allows coverage up to 400ga area for 100 minutes of flight time.

It is an optimal platform for rapid data acquisition with a high level of particularization for locations of large areas such as agriculture, construction and environmental protection. The drone is particularly effective in precision farming

43

Technical characteristics

Wingspan
Body Length
Takeoff weight
Flight duration
Startup Type
The shafe best ways and the state of the sta
Type of planting automatic landing on the body / landing manually
Effective scanning area up to 400 hectares per 1 flight
Effective scanning area up to 400 hectares per 1 flight

DRONE.UA CD600

CD600 – unmanned complex produced by Drone.UA. The characteristic feature of this complex is an increased duration and range of the flight. The platform is optimized for work on monitoring and inspection of polygonal objects to 150ga and lengthy objects up to 10 kilometres

Technical characteristics

10 km range

Frame Material
The configuration of the frame
Dimensions
Take-off weight
Flight duration
Type takeoff / landing
Effective scanning area
Effective range up to 10 kilometers (distancing from the launch point)
Range control channel
Transmission range of the video signal 2 km (optionally up to 15 km)
Maximum speed of the drone
Working height.
Working height up to 300 m Preflight preparation 5 minutes



UKRSPECSYSTEMS

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General information

	Products People's Drone PD-1 UAS , PC-1 quadcopte, Gyro Stabilized Gimbals
$\overline{\mathbf{a}}$	Range of applications Defense industry, the state border patrol, environmental protection, agriculture, oil and gas industry, hunting and fishing, extreme tourism
	Founded in
	Benefits

Production and sales of UAVs, quadrocopters and gyro-stabilized platforms

THERMAL CAMERA GYRO STABILIZED UAV GIMBAL

Our Thermal Camera Gyro Stabilized UAV Gimbal can be mounted on any Unmanned Aerial Vehicle platform. It combines light weight, durable materials and a high quality thermal sensor. With 40mm lens used on it you will be able to detect human size target at 800 m



Technical Specifications

- High quality thermal sensor with 640x540
- resolution and 30 Hz refresh rate
- Gyro-stabilized platform
- 360 degrees view
- Weight 820 g
- Warranty 6 months.

PEOPLE'S DRONE PD-1 UAS

People's Drone PD-1 UAS is a complete solution that consists of a lightweight 3 m wing span UAV platform equipped with a fuel engine, gimbal and ground control station. Other payloads are also available upon request. PD-1 is suitable for surveillance, aero photo mapping and other applications

Technical Specifications

- 5+ hour endurance

44

- 3000 m service ceiling
- Up to 8 kg payload capacity
- Multiple payload options
- Fast deployment time
- Encrypted datalink
- Exploitation in all weather conditions, 1 year warranty, Inspection of the engine – every 50 hours, every 300 hours – major refurbishment, replacement battery after 100 cycles

PC-1 QUADCOPTER

Our PC-1 quadcopter was designed as compact and light weight solution for those who want to take advantages of small aerial vehicles for surveillance and aerial shooting

Technical Specifications

- Compact foldable design
- Fast deployment
- 10x camera mounted on gyro-stabilized gimbal
- 30 minutes flight time - 5 km data link
- ITAR-free
- Warranty 6 months
- Exploitation in all weather conditions

MULTI SENSOR GYRO STABILIZED UAV GIMBAL

We designed our own Multi Sensor Gyro Stabilized UAV Gimbal to operate on surveillance Unmanned Aerial Vehicle Systems. It can be used in all weather condition and feature high quality day-view and thermal imaging sensors

Technical Specifications

- Day-view EO sensor with 36x optical zoom
- High quality IR sensor with 640x540 resolution and 30 Hz refresh rate
- Gyro-stabilized platform
- Electronic image stabilization module
- 360 degree view

10x

camera

- Weight 1650 g
- Warranty 6 months.



EO SENSOR 3-AXIS GYRO-STABILIZED GIMBAL FOR MULTI-ROTOR DRONE

Meet our EO sensor 3-axis gyro-stabilized gimbal with Sony FCB-EX1020 camera on-board. This gimbal was designed for VTOL drone applications. An operator sees real-time high quality video, while the stabilized platform provides smooth and stable image even when using 36x optical zoom feature

Technical Specifications

- 360 degree view
- Day-view camera with 36x optical zoom
- Electronic image stabilization (optionally)
- On-board recording device (optionally)
- Weight 1100 g
- Warranty 6 months

DUAL SENSOR 3-AXIS GYRO-STABILIZED GIMBAL FOR MULTI-ROTOR DRONE

3-axis gyro-stabilized gimbal designed for high endurance VTOL multi-rotor platforms. It features EO and IR payload. Both sensors provide superior video quality allowing to operate the gimbal in the day time, at night time or in low visibility conditions

Technical Specifications

- EO sensor with 36x optical zoom
- High quality thermal sensor with 640x540 resolution and 30 Hz refresh rate
- Gyro-stabilized platform
- 360 degree view
- Weight 1400 g
- Warranty 6 months





45



DERZHZOVNISHINFORM National Research and Information Center for Monitoring International Commodity Markets

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General information

The Center was established under the Ministry of Economy according to Presidential Edict in 1996. Today the Center is the leading research, information, and expert center of Ukraine in center of Ukraine in foreign trade. The staff numbers over 70 highly qualified experts, while the number of regular customers exceeds 5,000 companies, including foreign businesses. The Center annually processes over 20,000 enquiries.

One of the Center's missions is to assist Ukrainian and foreign businesses in their foreign trade. In this context Center monitors and researches key markets of export and import commodities, advises foreign trade operators on subject issues, supports Ukrainian exporters in their expansion at foreign markets.

In 2008 the Ministry of Economy of Ukraine assigned the Center to create official trade information web-portal. Over 2,500 users visit the Portal daily (more than 400,000 users visited the Portal last year). The Portal functions are to assist to foreign companies in target search of Ukrainian suppliers, helps in business networking, and provides support of business trip to Ukraine.

The Center's experts study consumer behaviour and create numerous market surveys of commodities and services in Ukraine, including market analysis, commodities analysis, diagnostics of market willingness to product. The Center's portfolio numbers over 300 market surveys in the field of metallurgy, chemistry, agriculture, constructing, etc. Market surveys were designed for such eminent companies and organizations as ISD Corporation, Swiss Trade Mission in Ukraine, British American Tobacco, Cargill, PJSC 'Rosava', TNS Ukraine etc.

The Center's experts regularly monitor domestic and foreign markets, study business activity and price

movement, provide analysis of significant market news and generate forecasts. Monitoring covers markets of energy and raw materials, agro-industrial complex and chemistry, construction materials, metal-mining complex etc.

The Center offers:

Information services of the Portal 'Import from Ukraine' (http://ukrexport.gov.ua; free access):

- reference information on key Ukrainian state bodies, Ukrainian Chamber of Commerce and Industry, professional unions and associations in Ukraine,
- information on international trade fairs, conventions, and congresses held in Ukraine;
- target search of Ukrainian suppliers and Ukrainianmade export products through the Portal's databases;

Analytical services of the Center:

- recent market news, information on price competition and business activity on the Ukrainian and global markets, weekly price movement, expert comments and short-term forecasts in the weekly periodical 'Commodity Monitor. Ukraine';
- macroeconomic indicators, investment projects, exportimport analysis, foreign-trade balance, rating of commodity groups, key economic events, short-term forecasts in the monthly periodical 'Trade Balance';
- compiling trade rating of leading Ukrainian producers, exporters and importers (6-digit HTS code);
- market survey, including market's brief description, review of production, import and export (10-digit HTS code), monthly dynamics, depth up to 10 years.

Support of business trips to Ukraine, arrangement of business negotiations with the Ukrainian companies, participation in business events held in Ukraine, etc.

FOR NOTES

FOR NOTES



IDEAS & SOLUTIONS EXPORT CATALOGUE SERIES

British Embassy Kyiv

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