

MOBILE ROBOTS

& SPECIAL USE EQUIPMENT



TABLE OF CONTENTS

ROBOTS

PIAP GRYF®

EOD mobile robot

page 4-5



PIAP PATROL®

Robot for C-IED and CBRN tasks

page 6-7



PIAP FENIX®

Lightweight reconnaissance robot

page 8-9



PIAP IBIS®

Robot for pyrotechnic operations and reconnaissance

page 10-11



PIAP TRM®

Tactical throwable robot

page. 12-13



EXPERT

Neutralizing robot

page 14-15



SPECIAL VEHICLES

PIAP EOD PICKUP

page 16-17



PIAP EOD VAN

page 18-19



PIAP MOBI TARGET

Robotic Shooting Training System Piap Mobi Target

page. 20-21



SPECIAL EQUIPMENT

EXPLORER

Inspection device

page 22-23



PIAP MULTISTRIKER®

Multifunctional pyrotechnic device

page 24-25



DISRUPTER SYSTEMS

VULKAN MAXI DE ARMER DISRUPTER SYSTEM

RDS 50-40 VUL, CSL 50-40 VUL

page 26-27



VIPER DISRUPTER SYSTEM

RDS 50-30 VIP, CSL 50-30 VIP

page 28-29



MOBILE X-RAY SYSTEMS

STENÓS

page 30-31



SOSTÓS

page 32-33



XIRÓS

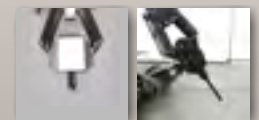
page 34-35



CBRNE ACCESSORIES

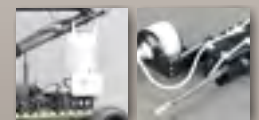
ENVIRONMENTAL MULTISAMPLER
GROUND SAMPLER
SPME ADSORBER
C-SENSOR (LCD 3.3)

page 36-37



MODULAR LIQUID SAMPLER
R-SENSOR (ZR-1)
WEATHER STATION

page 38-39



PIAP GRYF®

EOD mobile robot

PIAP GRYF® is a robot used for reconnaissance of terrain and hard to reach places. The manipulator with 5 degrees of freedom allows to lift loads weighing up to 15 kg. Robot's wheels can easily be removed, which reduces the dimensions of the robot and thus facilitates missions in tight spaces.

Owing to the applied drives, the robot smoothly overcomes uneven terrain and obstacles up to an angle of 45°. The robot is characterised by excellent manoeuvrability. Low weight makes it easy to transport and carry the robot, and its modular design allows for quick and easy change of additional equipment.



TECHNICAL DATA:

Dimensions of the mobile base with extended front flippers and manipulator and main camera mounted (length x width x height):	95 x 60 x 55 cm
Approximate total weight of the robot with manipulator, camera head and battery	47 kg
Maximum speed of the robot (without accessories):	Up to 6,5 km/h
Maximum radio transmission range in open area:	Over ≥800 m
Maximum lift capacity close-in at the front / fully extended at the front:	15 kg / 5 kg
Manipulator reach:	Vertically: 235 cm - from the ground 250 cm - leaning on the flippers Horizontally: 150 cm - from the edge of the tracks 200 cm - from the rotation axis
Operating time from fully charged battery:	2 h, possibility of quick battery replacement

PIAP PATROL®

Robot for C-IED and CBRN tasks

PIAP PATROL® is a medium tracked robot used for detection and neutralization, which can support operators in the most dangerous tasks. The robot design ensures the use of several accessories at the same time. Lightweight robot control panel is integrated with mobile x-ray systems and CBRN sensors. Robot's dimensions and applied drive system allow to carry out activities both inside buildings and in difficult terrain and compact and modular design allows it to be transported even in a passenger car.

Manipulator with 6 degrees of freedom and gripping function enables to lift and disposal loads up to 22 kg with maximum reach of 2 m.



TECHNICAL DATA:

Dimensions (length x width x height) in stowed position:	98 x 57 x 65 cm
Weight (without accessories) of the robot with manipulator and battery:	95 kg
Maximum Speed	8 km/h
Operating time (mission-dependent, possibility of quick battery replacement):	5 h
Maximum radio transmission range in open area:	800 m
Maximum lift capacity close-in at the front: fully extended at the front:	22 kg 7 kg
Maximum reach horizontal-from the vertical rotation axis:	1940 mm
Maximum reach Vertical-from the lower edge of the tracks:	2170 mm

PIAP FENIX®

Lightweight reconnaissance robot

It has been created to conduct reconnaissance in the immediate vicinity of military operations, including places inaccessible to humans.

PIAP FENIX® robot is unique with its operating time (up to 6 hours).

Cameras (optionally: thermal, night vision) mounted on the robot's mobile base allow to conduct day and night surveillance.

Excellent field properties of PIAP FENIX® robot (track-wheels chassis with moveable front flippers) ensure easy movement on hardened road surface, dirt roads, pathless tracts and in urban areas.

PIAP FENIX® robot is easy to transport – owing to its small size and low weight it can be carried in a backpack.

The robot, depending on its equipment, can serve either for surveillance, lifting and neutralization of dangerous loads or for transport of sabotage measures.



TECHNICAL DATA:

Dimensions of the robot without antennas and front flippers (length x width x height):	64 x 56 x 67 cm
Weight of the robot without manipulator:	18 kg
Maximum speed:	8 km/h
Range in open field:	800 m
Maximum lift capacity of the manipulator:	5 kg
Maximum horizontal range of the manipulator (from the end of the mobile base):	103 cm
Operational work time (depending on the type of mission, possibility of quick battery replacement):	Approx. 5 h

PIAP IBIS®

Robot for pyrotechnic operations and reconnaissance

PIAP IBIS® is a robot for pyrotechnic operations and reconnaissance. Upon installation of additional devices, it can be used, among others, for disposal of dangerous objects, chemical detection and rescue operations. Six-wheeled chassis with independent drive of each wheel allows to operate in challenging and varied terrain (bedrock, wetlands, muddy terrain and debris).



PIAP IBIS® is a fast robot (10 km/h). Special design of mobile base suspension ensures optimum wheel contact with the ground. Precision drive system ensures fluidity of the movement of every part of the robot, at any speed.

Manipulator with extendable arm ensures a large reach (over three meters) and a high range of motion in each plane. The manipulator lifts loads weighing up to 50 kg.



TECHNICAL DATA:

Dimensions of the robot in stowed position (length x width x height):	135 x 88 x 125 cm
Approximate total weight of the robot (without accessories):	320 kg
Maximum speed of the robot (without accessories):	10 km/h
Maximum radio transmission range in open area:	1000 m
Maximum lift capacity	
- close-in at the front:	50 kg
- fully extended at the front:	30 kg
- close-in on the side:	50 kg
- fully extended on the side:	15 kg
Manipulator reach:	Horizontally: 220 cm – from the ground Vertically: 330 cm – from the rotation axis
Operating time from fully charged battery:	Approx. 4 h, possibility of quick battery replacement

PIAP TRM®

Tactical throwable robot

Tactical Throwable Robot PIAP TRM® is a small robotic device designed to deliver support for operations in difficult to access and dangerous places. PIAP TRM® has been designed in response to the threats faced by forces responsible for public safety during area and objects reconnaissance.

PIAP TRM® can be thrown into a building or to an open area and steered by remote control in order to perform an inspection from a safe distance.

PIAP TRM®'s construction is designed to withstand the impact produced by a fall from up to 9 meters.

The current second generation of the robot has silent drives and a new handheld control panel which makes the PIAP TRM® even better than before.

PIAP TRM® has also possibility of carrying and initiating flash bang grenade.

Applications of PIAP TRM®

- ✓ Open area and objects inspection and reconnaissance.
- ✓ Possibility to transmit sounds produced in the robot's immediate area.
- ✓ Possibility to work in different light conditions.
- ✓ Possibility to cast light on targets and dangerous objects.
- ✓ Additional devices and accessories can be adapted to the robot (e.g. flash bangs, smog, teasing grenades).
- ✓ Up to 3 devices can be steered from one control panel.



Mobile base:

- ✓ Color camera with high sensitivity of 0.01 lux, view angle of 90° (with IR illuminators possibility of view of in infrared).
- ✓ Omnidirectional microphone.
- ✓ Connector for charger or additional accessories.

Key features:

- ✓ Much quieter drive system as compared to the first generation.
- ✓ 360 degree camera position adjustment without use of any tools.
- ✓ Ability to trigger Bang-flash grenades.

Control Panel:

- ✓ Display 4.3" TFT.
- ✓ Speaker.
- ✓ Connector for charger.
- ✓ AV connector for plugging a recording device or another monitor.
- ✓ Built-in digital recorder:
- ✓ Slot for SD card
- ✓ Micro USB connector to rip recordings

Key features:

- ✓ Lightweight and compact design.
- ✓ Integrated digital recorder.
- ✓ Ability to control multiple robots.

Universal Charger:

Power supply	100-240 V
Weight	160 g

TECHNICAL DATA:

Mobile base weight (basic version)	1.5 kg
Control panel weight	1.2 kg
Maximum speed	3.5 km/h
Maximum climbing angle	25°
Drop height	< 9 m
Range within buildings	30 – 100 m
Range in open areas	100 – 350 m
Basic equipment	Camera, microphone, LED illuminators and/or LED IR illuminators
Mobile base operation time on battery	≈ 1 h
Control panel working time on battery	≈ 3 h
Charging time mobile base/control panel	≈ 4 h
Number of devices operated from one control panel	≤ 3
Screen	Color, 4.3" TFT
Mobile base dimensions (length x width x height):	215 x 212 x 170 mm
Control panel dimensions (length x width x height):	165 x 265 x 185 mm

EXPERT

Neutralizing robot

Expert mobile robot is a device designed to carry out operations in means of transport. The design of the robot reconciles two conflicting features: small mobile base allows manoeuvring in tight spaces, and its long manipulator allows picking up objects from hard to reach places. Innovative stowable lateral stabilizers enable secure fixing of the mobile platform in places such as between rows of seats. This allows safe lifting of considerable loads and precise operation of the manipulator even during maximum lateral reach of its arm.



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Expert is equipped with 6 cameras: on the manipulator (main camera), on the gripper, at the back and front of the robot. Additionally, two cameras are placed on the sides of the front tracks, these enable inspection of areas such as places under seats. Front tracks (with remote controlled tilt angle) ensure stability of the structure when negotiating high obstacles and climbing stairs.



TECHNICAL DATA:

Dimensions of the robot in stowed position (length x width x height):	88 x 47 x 78 cm
Approximate total weight of the robot with manipulator, camera head and battery:	197 kg
Maximum speed of the robot (without accessories):	2 km/h
Maximum radio transmission range in open area:	800 m
Maximum lift capacity close-in at the front / fully extended at the front:	15 kg / 8 kg
Maximum reach:	Vertical: 290 cm - from the ground Horizontal: 230 cm - from the rotation axis
Operating time from battery:	Approx. 4 h

PIAP EOD PICKUP

EOD & CBRN Rapid Response Vehicle

The vehicle is designed for transporting mobile robots and accessories necessary during the operation. Adapted to carry 4 officers with personal equipment.

The pickup has an easily accessible loading surface along with the body enabling safe placement of specialist equipment, in accordance with individual user requirements.

In addition, the vehicle is equipped with a hook designed to tow a trailer up to 3500 kg.

PIAP EOD PICKUP is a platform of high mobility allowing for quick relocation and implementation of tasks in all conditions such as urban areas or in difficult (unpaved) terrain.



We declare willingness to modify the vehicle and optional equipment according to the user's needs.

PIAP EOD VAN

EOD VEHICLE Type VMA1 basic tool for bomb squad technician.

The vehicle is allows to carry a mobile robot with all the equipment necessary to counteract risks associated with explosives. Innovative multi-source electric power supply system gives energy independence in the place of action.



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TECHNICAL DATA:

Max gross weight	5 t
Max load capacity	1,6 t
Length	7 m
Width	2 m
Height (unladen)	2,8 m
Wheel base	4,3 m
Front axle	Increased load capacity
Springs and dampers	Reinforced
Roof	High
Trailer coupling	2 t or 3.5 t, ball headed
Side door	Right, sliding

We declare willingness to modify the vehicle and optional equipment according to the user's needs.

PIAP MOBI TARGET

Robotic Shooting Training System

PIAP MOBI TARGET is a tool for conducting advanced shooting training. It is intended for training and improving the skills of officers of the services responsible for state security and defense, as well as armed security guards and sport shooters.

PIAP MOBI TARGET consists of a mobile platform, operator's control panel (with training interface) and a relay station.

The system's advantage is its mobility, the ability to move quickly and complete independence from the existing communication infrastructure.

PIAP MOBI TARGET can operate in close proximity to each other and in the vicinity of local obstacles on the shooting range.

Robotic target moves on long distances (up to 1200 m) - this allows for sniper training, where shooters can fire at long distances.

PIAP MOBI TARGET has been developed with modularity in mind, which allows for configuration according to individual customer requirements.

Depending on the configuration, it is possible to install paper target holders (basic variant) or a 3D dummy lifter equipped with a hit detection and parameterization system (advanced variant) on mobile platforms.



DANE TECHNICZNE:

Dimensions of the mobile platform with a lift (length / width / height)	100/90/96 cm
Mass	380 kg
Maximum speed	10 km/h
Possibility of smooth speed regulation in the whole range from zero to maximum speed using the joystick of the Operator's Control Panel	0-10 km/h
Driving system	Wheels
Gradeability	Up to 20°
Lateral tilt	Up to 25°
Maximum range of radio transmission in open area	1200 m



The project is co-financed by the European Union from the European Regional Development Fund under the Smart Growth Operational Programme. The project is carried out as part of the competition of the National Center for Research and Development No. 4 / 1.2 / 2016, Measure 1.2 „Sectoral R&D programs”.

EXPLORER

Inspection device

EXPLORER is a device for inspection of hard to reach and dangerous places. Security services can use it for applications such as inspection of car chassis, ventilation shafts, manholes or technical corridors. EXPLORER consists of a remote-controlled camera with a telescopic boom of 0.4 to 1.57 m operational length.

If needed, the camera can also be used with a straight, 4.1 m long, boom or with an adjusted angle boom of up to 2 m.

There is an option of a manual camera (with manually adjusted angle) which weighs no more than 0.5 kg (with the boom).

Owing to LED illuminators built into the camera head, EXPLORER can work in different lighting conditions. The camera can also be equipped with IR illuminators.



TECHNICAL DATA:

Dimensions of the device when folded/extended (short boom)	550 / 1720 mm
Weight (without accessories) with standard boom and camera head	0.65 kg
Operating time from fully charged battery (dependent on type of mission, possibility of quick battery replacement)	Approx. 2.5 h
Camera	
Movable, colour, with strong IR LED illuminators or white LED light	
Camera range of motion	180°
Control panel	
Dimensions during operation (length x width x height):	212 x 111 x 68* mm *110 mm – with battery
Weight of the control panel with and without battery:	1.15 / 0.85 kg
LCD screen:	Colour, 5", resolution 320x234

PIAP MULTISTRIKER®

Multifunctional pyrotechnic device

PIAP MULTISTRIKER® is a device used to carry out tasks supporting the actions of EOD teams, special forces and engineering units. It is designed for use wherever the need is to apply high energy in a short time to achieve the desired effect. The device uses the strike force of a sliding working piston powered by burnt powder gases.

PIAP MULTISTRIKER® can be used on a tripod, triggered by a dedicated remote control or as an accessory mounted on all mobile robots produced by PIAP and released from their control panels.



Key applications include:

- ✓ Knocking windows, knocking holes in surfaces and lock fittings or other small parts.
- ✓ Piercing objects, e.g. tires.
- ✓ Breaking hinges.
- ✓ Cutting metal rods, cables, wires, chains, tubes.
- ✓ Cutting off elements.
- ✓ Initiating non-electric detonators such as STS, NDS, NONEL.

TECHNICAL DATA:

Maximum dimensions (length x width x height)	46 x 12 x 20 cm
Weight (dependent on the completion)	4 - 5 kg
Number of shots (dependent on option)	6 - 10

VULKAN MAXI DE ARMER DISRUPTER SYSTEM

RDS 50-40 VUL, CSL 50-40 VUL

The VULKAN Disrupter System is a 4th generation maxi modular, variable projectile mass, recoilless equipment which can be configured as:

- Close Up De Armer using plain slug or chisel slug against UXB fuses.
- Stand Off De Armer using spin stabilised plain slug at ranges up to 30m (100ft) against UXB fuses.
- Close Up De Armer using blade projectile typically against pipe bombs and certain other IEDs.
- Close Up Disrupter using either 200ml or 300ml of water in C-IED applications.
- Stand-off disrupter using 200g spin stabilised frangible projectiles at ranges of up to 30m (100ft) and beyond in C-IED applications and in breaching/entry SWAT operations etc.

Unique features of the VULKAN include:

- ✓ 40 mm rifled barrel for stand-off applications.
- ✓ Gas regulator which varies gas volume to the compensator permitting the system to be completely recoilless for projectile masses of between 200 g and 300 g.
- ✓ Powerful green lasers with enhanced safety features such as programmable time out. For safety Laser Sights feature automatic time-out and cannot be used independent of the turret and stand.



- ✓ Lasers feature contra rotating prisms which make zeroing quick and easy.
- ✓ The VULKAN is constructed in either tempered stainless steel or tempered titanium in situations where a very lightweight system, is desirable. The canon in titanium is approximately half the weight of the stainless steel version.

TECHNICAL DATA:

Stainless Steel Version - Weights & Dimensions*

Cannon fully loaded - Stainless Steel Version	4.42 kg
Multi Position Stand on its own with Turret	5.34 kg
Cannon Loaded and ready for emplacement in Multi Position Stand	9.76 kg
Complete equipment in transit case including stand, inert consumables for ten firings and 3 off each projectile type	28 kg
Cannon overall length with 40 mm Rifled Barrel fitted, including Breech Plug	590 mm
Cannon overall length with Choked Water Barrel fitted, including Breech Plug	627 mm
Overall diameter across Compensator	80 mm
Transit Case dimensions	781 x 520 x 295 mm

* All weights and dimensions are approximate and details are subject to change without notification

VIPER DISRUPTER SYSTEM

RDS 50-30 VIP, CSL 50-30 VIP

The VIPER is a 4th generation 30 mm Midi Disrupter featuring, variable projectile mass and recoilless operation. It can be configured as:

- Close up disrupter using either 60, 100 or 150ml of water or elastomer in C-IED applications.
- Stand-off disrupter using 150 g spin stabilised clay frangible projectiles at ranges up to 30 m in C-IED applications and in disrupting entry SWAT operations etc.



Unique features of the Viper include:

- ✓ Gas regulator which varies gas volume to the compensator permitting the system to be recoilless for projectile masses of between 60, 100 and 150 g.
- ✓ 30 mm rifled barrel for long stand-off applications.
- ✓ The VIPER is available constructed in either tempered stainless steel or, in a super lightweight version, in tempered titanium.
- ✓ The Viper disrupter system utilises the same turret, sights and multi position stand as the Maxi VULKAN System.



TECHNICAL DATA:

Stainless Steel Version - Weights & Dimensions*

Cannon on its own with Rifled Barrel complete but unloaded	2.46 kgs
Cannon on its own with Choked Water Barrel complete but unloaded	2.50 kgs
Cannon Loaded and ready for emplacement	2.99 kgs
Cannon mounted on Multi Position Stand with Laser Sights	8.33 kgs
Complete equipment in transit case including stand, inert consumables for ten firings and 3 off each projectile type	22 kgs
Dimensions of Transit Case, includes space for optional PIM and Power Pack	781 x 520 x 295 mm

* All weights and dimensions are approximate and details are subject to change without notification

STENÓS



Logos Imaging's STENÓS is our lightest, and most rugged large format DR imaging system. We were the first to introduce a glass-free DR imager to the security market with the 6"x8" PRÓTOS, we followed with the 12"x12" XIRÓS, and now the 14"x17" STENÓS with the 3543N panel further continues Logos Imaging's commitment to the leading edge of DR imaging design.

The panel also offers the advantages of built in wireless communications and a removable battery that provides six hours of operation for situations where ultra-portability and up to 400 m wireless communications are desirable.

The STENÓS 3543N panel glass-free design allows for the smallest borders of any 14x17 DR imager in the market at just 3 mm on one side. Coupled with the IP67 rated enclosure, this allows the STENÓS 3543N panel to stand apart from the 14"x17" competition in durability.



This design provides users an undeniable advantage over competitive systems by providing a solution that stands up to the environmental challenges faced in real-world scenarios and by allowing nearly ground level imaging to be sure the threats are visible. In full wireless configuration, the STENÓS system in a backpack weighs under 22 lb (10 kg). In this configuration, users can quickly assess items using the panel's internal wireless communication and a MAKRINÓS wireless X-ray trigger.

In environments where wireless communication is acceptable, the entire imaging system consists of only a flat panel detector, an operating PC, LIA Security software, carrying case, wireless control device, and a Golden Engineering Source. In full wireless mode, the STENÓS can operate for up to six hours on a single battery charge. The system includes two batteries for a total of up to twelve hours of operation on a single battery charge (additional batteries can be purchased to extend run time). With a wireless range of up to 400 m* users can work safely in almost any environment.

Features:

- ✓ IP67
- ✓ 3 mm Bottom Border
- ✓ High Resolution and Sensitivity, 140 µm Pixel Size, 3.5 lp/mm
- ✓ Glass-Free

TECHNICAL DATA:

Technology	Amorphous Silicon with TFT
Scintillator	Gadox
Pixel Area	13.8" x 16.8", 350 x 427 mm
Pixel Matrix	2560 x 3072 pixels
Pixel Size	140 µm
Limiting Resolution	3.5 lp/mm
AD Conversion	16 bits
Communications Interface	Wireless IEEE 802.11ac / Wired LAN
Communications Range	Wireless up to 150 m Wireless option* (using 2.4 GHz) Wired option 15 m to 200 m
Weight	Without battery - 7.7 lb (3.5 kg) With battery - 8.6 lb (3.9 kg)
Dimensions (Panel)	15.8" x 18.1" x 0.6" (402.5 x 460.0 x 15 mm)
PC Specs (Minimum)	Core i7 Processor, 4 GB RAM, 500 GB hard disk, 14" 1600 x 900 display, Windows 7 Professional

* Line of Sight

All weights and dimensions are approximate and details are subject to change without notification

SOSTÓS

Logos Imaging's SOSTÓS complements the range of our newest, and most rugged small format DR imaging systems. We were the first to introduce a glass-free DR imager to the security market, and the SOSTÓS system with the 2626N panel continues Logos Imaging's commitment to the leading edge of DR imaging design. The system is no different to its bigger counterparts, and like the XIRÓS and STENÓS it also offers the advantages of built in wireless communications and a removable battery that provides three hours of operation for situations where ultra-portability and up to 275 m* wireless communications are desirable. With the removable handle and antenna, this is a perfect solution when all one needs is to grab some X-ray images for further inspection off-site. The SOSTÓS 2626N panel's glass-free design allows for the smallest borders on the market at just 3 mm on two sides, and minimal dead space on the remaining sides, making 83% of the imager surface an active area.



This design, coupled with IP67 rated enclosure, provides users an undeniable advantage over competitive systems regardless of where the job site is located. Ideally suited for dismantled SOF operations, the SOSTÓS full wireless system in a backpack configuration weighs just under 11 lb (5 kg). With internal wireless communication, the SOSTÓS is perfect for users that want to quickly assess an item. At 2.6 lb (1.2 kg) and only 0.6 in (15 mm) thin, the SOSTÓS panel can be easily transported on target with minimal effort. In environments where wireless communication is acceptable, the entire imaging system consists of only a flat panel detector, an operating PC, LIA Security software, carrying case, wireless control device, and a Golden Engineering Source.

If desired by the user, the AED mode allows to capture the X-ray images directly on the panel, which does not need any kind of connection, with the X-ray being fired manually from the generator. The panel shows a visible image count reflecting how many images are already stored - with the space for up to 80 images, we hope its potential to trully fill the gap. The two batteries included in the system allow for a total of up to six hours of operation on a single battery charge, in almost any environment.

Features:

- ✓ IP67 and glass-free
- ✓ 3 mm bottom and side border
- ✓ Lightest weight
- ✓ AED mode with no on-site connection needed

TECHNICAL DATA:

Technology	Amorphous Silicon with TFT
Scintillator	Gadox DRZ Plus
Pixel Area	10.1" x 10.1", 258 x 258 mm
Pixel Matrix	1536 x 1536 pixels
Pixel Size	168 µm
Limiting Resolution	2.98 lp/mm
AD Conversion	16 bits
Communications Interface	Wireless IEEE 802.11ac / Wired LAN
Communications Range	Wireless 275 m with standard antenna* Wired option 15 m to 200 m
Weight	With battery - 2.64 lb (1.2 kg)
Dimensions (Panel)	11.02" x 11.14" x 0.6" (280 x 283 x 15 mm)
PC Specs (Minimum)	Core i7 Processor, 4 GB RAM, 500 GB hard disk, 14" 1600 x 900 display, Windows 7 Professional

* Line of Sight
All weights and dimensions are approximate and details are subject to change without notification



XIRÓS



Logos Imaging's XIRÓS is our newest, and most rugged small format DR imaging system. We were the first to introduce a glass-free DR imager to the security market with the PRÓTOS, and the XIRÓS system with the 2929N panel continues Logos Imaging's commitment to the leading edge of DR imaging design. The system also offers the advantages of built in wireless communications and a removable battery that provides eight hours of operation for situations where ultra-portability and up to 400 m wireless communications are desirable. The XIRÓS 2929N panel's glass-free design allows for the smallest borders on the market at just 3 mm. Coupled with the IP67 rated enclosure, this feature allows the XIRÓS 2929N panel to stand apart from the competition in durability. This design provides users an undeniable advantage over competitive systems regardless of where the job site is located. Ideally suited for dismantled EOD operations, the XIRÓS full wireless system in a backpack configuration weighs under 20 lb (9 kg).



With internal wireless communication, the XIRÓS is perfect for users that want to quickly assess an item. At 2.8 kg and only 15 mm thin, the XIRÓS 2929N panel can be easily transported on target with minimal effort.

In environments where wireless communication is acceptable, the entire imaging system consists of only a flat panel detector, an operating PC, LIA Security software, carrying case, wireless control device, and a Golden Engineering Source. In full wireless mode, the XIRÓS can operate for up to eight hours on a single battery charge. The system includes two batteries for a total of up to sixteen hours of operation on a single battery charge (additional batteries can be purchased to extend run time). With a wireless range of 400 m* users can work safely in almost any environment.

Features:

- ✓ IP67
- ✓ 3 mm Bottom Border
- ✓ High Resolution and Sensitivity, 140 µm Pixel Size, 3.5 lp/mm
- ✓ Glass-Free

TECHNICAL DATA:

Technology	Amorphous Silicon with TFT
Scintillator	Gadox
Pixel Area	11.3" x 11.3", 287 x 287 mm
Pixel Matrix	2048 x 2048 pixels
Pixel Size	140 µm
Limiting Resolution	3.5 lp/mm
AD Conversion	16 bits
Communications Interface	Wireless IEEE 802.11ac / Wired LAN
Communications Range	Wireless 400 m or up to 1,600 m with longrange Wireless option* (using 2.4 GHz) Wired option 15 m to 200 m
Weight	Without battery - 4.8 lb (2.2 kg) With battery - 5.7 lb (2.6 kg)
Dimensions (Panel)	13.1" x 13.1" x 0.6" (331.5 x 331.5 x 15 mm)
PC Specs (Minimum)	Core i7 Processor, 4 GB RAM, 500 GB hard disk, 14" 1600 x 900 display, Windows 7 Professional

* Line of Sight
All weights and dimensions are approximate and details are subject to change without notification

CBRNE Accessories



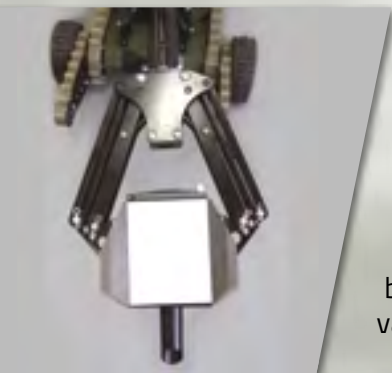
ENVIRONMENTAL SWAB

The tool is designed to obtain material for chemical or biological laboratory analysis by taking swabs from the surface of objects, on which hazardous substances may accumulate. The tool is transported in a holder mounted to the Picatinny rail on the robot's mobile base and it's picked with the manipulator for the time of sample collection. The tool is delivered with a basic set of consumables.



SPME ADSORBER

The device is dedicated to acquiring chemical particles from the air and liquids onto the SPME fiber for laboratory analysis, e.g. in a gas chromatograph. It can be transported on the Picatinny rail on the mobile base or the manipulator as well as in the gripper's jaws and controlled from the robot's console. The device is delivered with a basic set of consumables.



GROUND SAMPLER

The tool serves to take samples of the substrate (earth, sand, snow, etc.) for laboratory analysis. It's transported in a holder protecting the robot and personnel against contamination by the collected material and it's picked with the manipulator for the time of sample collection. The holder is mounted to the Picatinny rail on the mobile base of the robot. The tool is delivered with working tips for various substrates and a basic set of consumables.



C-Sensor (LCD 3.3)

Device for the detection of the chemical warfare agents (CWAs) and the toxic industrial chemicals (TICs), based on the LCD3.3 detector by Smiths Detection. Information about detected substances is sent to the robot's console in real time. The operator can set alarms signaling the presence of particular threats on the console's screen. The device can be transported on the Picatinny rail on the mobile base or the manipulator as well as in the gripper's jaws. The device is delivered with a basic set of consumables.

CBRNE Accessories



MODULAR LIQUID SAMPLER

The device is designed to take samples of liquids from open containers (e.g. bottles or jars) and the recesses of the substrate. Owing to the use of an external sampling line, obtaining collected sample does not require disassembling the device. It's carried in the gripper's jaws and controlled from the robot's console. The device is delivered with a basic set of consumables.



WEATHER STATION

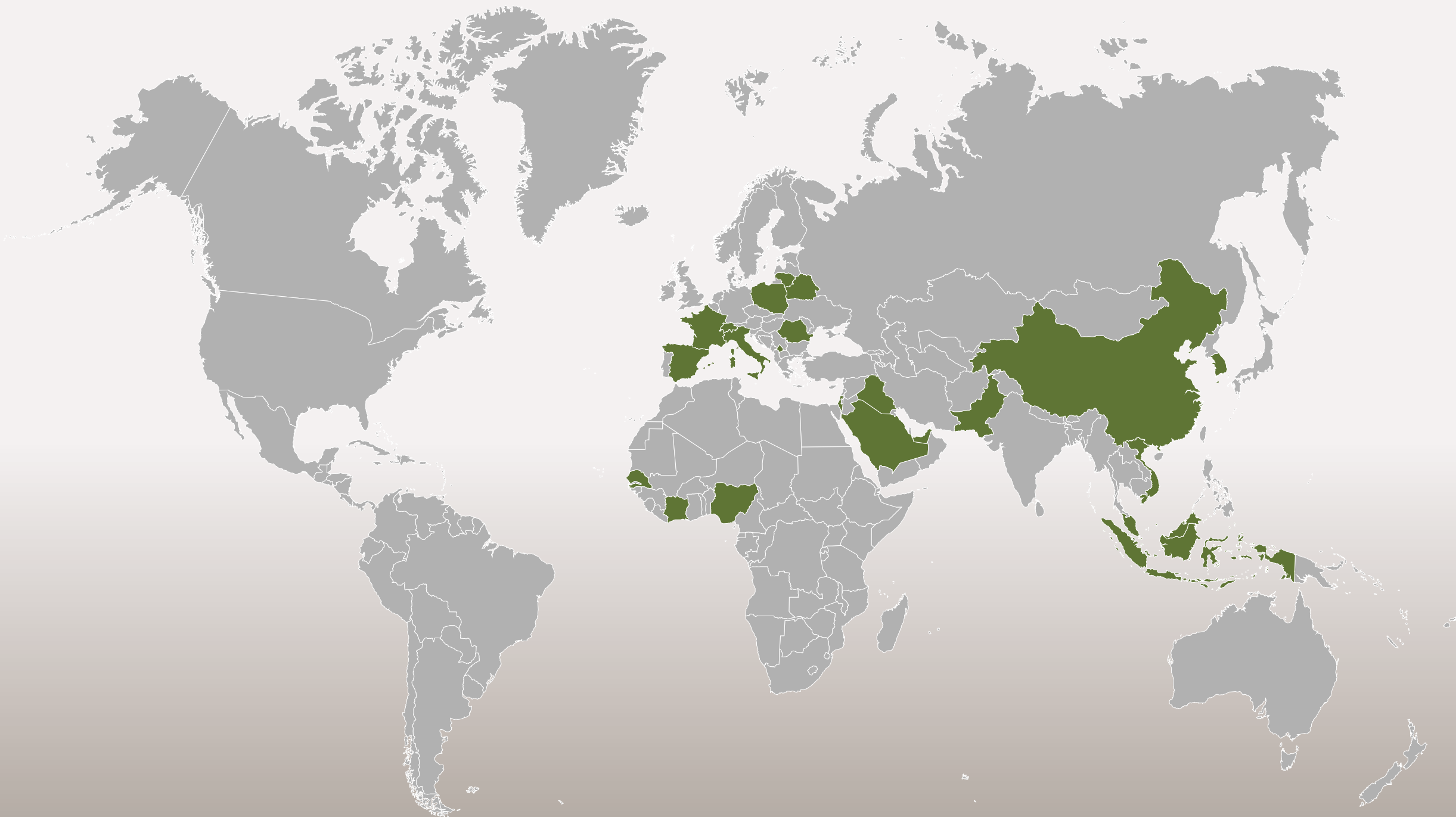
The device allows to make meteorological measurements in the area of the robot's operation, in terms of: wind strength and direction, temperature, precipitation, air pressure and humidity. This information is particularly important in incidents related to CBRN contamination, as it allows to estimate the direction of contamination spread in the form of vapors or dust and to facilitate the planning of tasks depending on the prevailing weather conditions. Measurement data from the station are sent to the robot console in real time. The device is transported on a Picatinny rail on a mobile base.

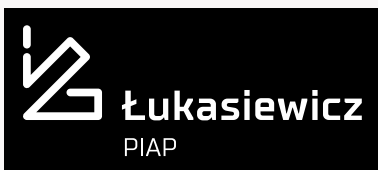


R-SENSOR (ZR-1)

A device enabling omnidirectional measurement of the gamma radiation dose rate absorbed in the air, based on the ZR-1 detector by Polon-Alfa. Measurement information is sent to the robot's console in real time. The operator can set alarms signaling the presence of the certain level of the particular radiation on the console's screen. The device can be transported on a Picatinny rail on the mobile base or the manipulator. Does not require any consumables.

MAP OF PIAP'S ROBOTS SALES IN THE WORLD





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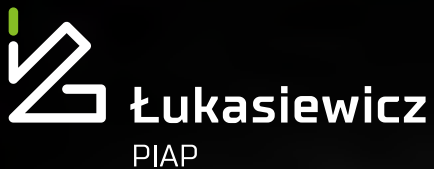
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