

# MILITARY SYSTEMS

E T E C H N O L O G Y

## B MEDICAL SYSTEMS

Production & distribution of military field catering & medical equipment

## BLUE WOLF

Worldwide leader in design, engineering, & manufacturing of lighting products used in commercial, military, & marine applications

## NOPTEL

Development & manufacture of innovative applied optoelectronic solutions

PLUS...

BREAKING NEWS  
FROM...

EXPLOTRAIN  
IFS  
QIOPTIQ  
WILL-BURT

Image Courtesy of Qioptiq



# MAKING THE WORLD A SAFER PLACE

## SURPLUS AND OBSOLETE SMALL ARMS AMMUNITION DESTRUCTION

In the new global economy many Armed Forces are downsizing to reflect the budgetary constraints of their respective countries. This brings with it surplus items which, because of the reduction in the number of personnel, are put into storage until a suitable method of disposal is found. High on the priority list is ammunition of all types and nature. Small Arms Ammunition (SAA) accounts for a large percentage of any military organisation's arsenal. It also contributes significantly to the stockpile of surplus, obsolete and shelf life expired ammunition.

EOD Solutions Ltd in conjunction with CALDO engineering have developed the Transportable Ammunition Destruction System (TRADS) to destroy SAA in an environmentally responsible manner. There are two systems available, the TRADS 40 and the TRADS 20, both of which employ ceramic filtration backed up with a catalytic filter to ensure complete cleaning of the gases. Recent improvements have allowed the system to clean the gases even more efficiently to comply with EC Emissions Directive 2007 and the USA Environment Protection Agency guidelines - one of the most stringent in the world.

Both systems are constructed in ISO 20 foot container frames to allow sea and air freight delivery and vehicle transportation. The frames also allow for ease of maintenance and observation during ammunition processing. The TRADS 20 system shown here is designed to undertake medium and small-scale destruction of SAA where the ammunition is dispersed in different locations.

TRADS 20 will destroy a minimum of one and a half tonnes of ammunition per day. The system destroys all SAA and their secondary effect components except high explosive rounds and is completely enclosed to make it safe for the end user.



TRADS 20 utilises a furnace that allows small quantities of ammunition to be destroyed and then emptied into a bin for further processing such as Free from Explosives Inspection. It can then be filled again with the next batch of ammunition. Because this system is enclosed it means that the destruction process and the emptying is a continual cycle, automatic and completely safe for the operators.

EOD Solutions Ltd has recently manufactured the TRADS 20 and 40 for a client to operate in Afghanistan. The TRADS has proven itself in the most arduous of conditions over a two-year period during which time the system destroyed all types of SAA up to and including 14.5 mm ammunition.

It requires no infrastructure as electrical power and compressed air are built into the system. It can be positioned on site and can be working within 36 hours requiring only diesel fuel to begin operations. TRADS 20 is the ideal system for disposing of disbursed stockpiled SAA at an affordable cost.

[www.eodsonline.com](http://www.eodsonline.com)



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## Welcome to this edition of the Military Systems & Technology newsletter.

As an established web portal for the International Defence & Aerospace Industry, we strive to provide a comprehensive and detailed listing of Military Equipment Suppliers, Products and Services. This newsletter is designed to keep you up-to-date with latest news and events within the Defence Industry's Governing Bodies, Organisations and Companies.

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# PRODUCTION & DISTRIBUTION OF MILITARY FIELD CATERING & MEDICAL EQUIPMENT

B Medical Systems is an international company based in the Grand Duchy of Luxembourg, right at the heart of Europe. The company is ISO TS 9001:2008 and ISO 14001:2004 certified. B Medical Systems has achieved an impressive track record of growth with around 150 employees.

**B Medical Systems covers the following 2 business areas in military markets:**

- Production and distribution of military field catering equipment (Food & Beverage Equipment Division)
- Production and distribution of cold chain equipment, freezers and refrigerators for the medical sector (Medical Systems Division)

## Military Field Catering Equipment

B Medical Systems offers a wide range of catering equipment for military and other outdoor activities. The FIELD CATERING EQUIPMENT programme includes insulated transport food containers, field refrigerators & freezers and insulated food & beverage containers already sold to and appreciated by various Armed Forces worldwide.

## Insulated Food Containers for Fresh and Frozen Food Transports

B Medical Systems offers a wide range of rugged military insulated containers for the transport of fresh or frozen food. These units are so well

insulated that they can accommodate transport of fresh or frozen goods for up to two days by non-refrigerated trucks. Different capacities are available from 13 to 1000L.

## Military Field Refrigerators and Freezers

New developments in the area of field refrigeration include AC, DC and AC/DC field refrigerators encased in solid, rotational moulded, insulated cabinets.

They are dedicated to integration in containerized kitchens, shelters, barracks or tents to maintain perishables in good and safe conditions. Several capacities are available to provide the best possible choice depending on deployment conditions. Additionally, Dometic refrigerators and freezers can be used as transport refrigerators when dedicated batteries or electrical connections are made available on the transport vehicle.

Models RF-400, RF-650 and RF-1000 are new and robust compressor driven refrigerators and freezers for intensive use for catering, industrial and military applications. They are equipped with an automatic defrosting system and have a removable cooling system to allow quick repair or replacement operations.





Model R-120 is a mobile 136L capacity compressor driven refrigerator for transport and interim storage of food preparations, dairy products and other perishable products. CF-850 VAN models provide low cost alternatives to traditional van conversion.

Robust Insulated Food and Beverage Containers B Medical Systems robust food and beverage containers have outstanding insulation performance to withstand the most rigorous climatic conditions. All containers are portable

and stackable and are constructed of solid plastic. Most of proposed models have a stainless steel inner liner or pan for a most hygienic solution that will not alter the original flavour of food preparations or beverages.

Models GB-3 and GB-6T are insulated beverage dispensers; these are the most technologically advanced insulated beverage dispensing containers available on the market.

Models GB-7 and GB-7 Compact are ideal

Gastronome-compatible insulated food carriers with enhanced portability.

Models GB-18 and GB-24 are front door opening Gastronome-compatible insulated containers for transport and interim storage of food preparations.

Model GB-24 PLUS is a superior food carrier equipped with a thermoelectric system that maintains temperature of warm or cold food preparations much longer.

Model GB-10 is an insulated container including a 24L cooking pot for soups and semi-solid food preparations.

## B Medical Systems: The Comprehensive Medical Refrigeration Solution

The ultramodern range from Dometic Medical Systems comprises blood, pharmaceutical and laboratory refrigerators, freezers, ultra-cold freezers (to  $-86^{\circ}\text{C}$ ) and transport boxes. Sensitive medical items such as vaccines, blood and blood components, temperature-sensitive pharmaceuticals, tissues and biological samples are stored in the appropriate optimum conditions without any risks. Different sizes and specifications of equipment are available to offer the most appropriate solutions.

## Blood Chain Boxes for Blood Transportation

B Medical Systems RCB blood boxes are specially designed to meet the requirements of field conditions for military tasks as well as for civil aid organizations. These guarantee safe transport of temperature-sensitive supplies such as blood and blood products, plasma, blood samples and pharmaceutical products. Made of rotomoulded polyethylene, these







transport boxes offer excellent mechanical resistance, as proven by drop tests, and are not subject to corrosion. They are perfectly suited to intensive use, with frequent handling under difficult climatic conditions. The polyurethane foam injected between the double walls of these boxes ensures perfect insulation and thus preservation of the quality of blood, blood products and pharmaceutical products even over long periods of transport. Used with frozen icepacks or also wet ice for some versions, they are fully self-sufficient with respect to the ambient environment and therefore ideal for all transport stages.

The icepacks the boxes require as their source of refrigeration are frozen in a supplementary device specially designed for this purpose (MT 900).

The boxes RCB 4 B – 25 E offer different gross volumes (2,2 l – 44 l) and transport capacities (1 – 40 blood blags). The RCB 42 P is a thermo stabilizer designed for storing and transporting

pre-cooled blood and medicinal products over long periods of time. The refrigerating unit operates with nearly all types of electricity (DC/AC). The RCB 42 P ensures mobility and provides all the services of a blood bank refrigerator.

All boxes are in conformance with ADR RID (2008/68/EC), IMDG (2002/84/EC) and ICAO-TI / IATA-DGR.

## Solar Direct Drive Refrigerators

B Medical Systems has developed a comprehensive storage and transport concept to suite all stages of the Cold Chain even under difficult climatic and technical conditions.

The Solar Direct Drive solution consists of three large capacity refrigerators working on solar panels. It uses the energy source that never runs dry: our sun ! Contrary to most of the existing

systems, no more batteries for back up are needed.

The B Medical Systems Solar Generator kit is unique. It is a pre-assembled system that only needs to be opened and adjusted to work. It connects to the refrigerators TCM40SDD, TCM2000 or TCM3000 by quick connector. Its packing is at the same time its body which is rotomoulded.

### Close co-operation with prestigious humanitarian aid organizations, armed forces and companies

- WHO, UNICEF, USAID, JICA, the International Red Cross, Aid Agencies, NGOs,...
- Military customers (US Marine Corps, US Army, UK Special Forces, German Army, Belgian Army, Algerian Army, Moroccan Army...)
- And Governments





Presents

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## Scalable, Multi-Protocol Connectivity

Rugged Avionics Interface Computer



### Next Generation Architecture

- Higher Density Computing & Connectivity Performance
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- Removable Storage Drive
- USB 3.0 Support

### Proven & SWaP Optimized System

- Expanded Thermal Capabilities
- Rugged Deployable Compact Enclosure
- MIL-STD-810G Shock, Vibration & Immersion
- MIL-STD-461F EMI

### Multi-Protocol Flexibility

- Ethernet, MIL-STD-1553, ARINC 429/717, CANbus 2.0/ARINC 825, RS-232/422/485 & Avionics/Digital Discrete I/O
- 3 modes (Remote Access, Protocol Conversion & Standalone)

**Configurable:** (1) XMC/PMC & (2) Mini-PCIe sites

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# Blue Wolf

## WORLDWIDE LEADER IN DESIGN, ENGINEERING, & MANUFACTURING OF LIGHTING PRODUCTS USED IN COMMERCIAL, MILITARY, & MARINE APPLICATIONS

Blue Wolf is a top recognized leader in the design, engineering, and manufacturing of lighting products used in commercial, military, and marine applications worldwide. With over 50+ years of design and manufacturing experience.



Blue Wolf's expanding global client base includes Rotor and Fixed wing aircraft, Emergency services aircraft, Industrial applications, marine underwater lighting applications, Military Land, Air, and Sea vehicles.

### NIGHT VISION LIGHTING

Blue Wolf's high strength, 60601-T6 aluminum made LED Night Vision lighting products, are MIL-STD-3009 NVIS compatible for use with NVG Goggles or any military night vision application requiring NVIS compatible LED lighting. Our NVG upgrade products, whether

they're used in NVIS modifications or for new add-on lighting, offer superb light output for all interior lighting and cargo bay area illumination needs. Products are offered in other colors, regular standard white light, other NVIS options, as well as IR lighting.

#### Some Blue Wolf LED Lighting Options include:

- Pod Lighting
- Utility and Cargo Bay lighting
- Round and Rectangular Dome Lighting
- Flexible Map Lights
- Post Cap Lights
- Step Lights







## HEAVY DUTY MILITARY VEHICLE LIGHTING

Blue Wolf's Heavy Duty Land vehicle lighting products include a 254mm long Flexible Gooseneck Map Light with a MIL-STL-D38999/20 connector for easy power connection. With a 0 to 100% dimming, this Map light provides exceptional light output utilizing 20 LED's while providing the end user with tactile feedback on the dimming knob during adjustment.

### Some Highlights of the BW-A125 Map Light:

- 28 Vdc @100 mA
- Operating temp -40 to 50 Degrees C
- Overvoltage, transient, and reverse polarity protection
- Constant light output during any 18 to 34 Vdc swings
- NVIS, WHITE, IR, and other color options
- MIL-STD-810G
- MIL-STD-3009 NVIS white compatible LED lighting
- Impossible to over torque or break dimming knob due to mechanical stops
- IP67 rated.

Blue Wolf's Round Dome light is small in size and shape with a 3.5" diameter and only 0.490" thick. This light is capable of providing 0 to 100% light output through a third PWM input wire and is perfect for general use lighting and/or cargo bay lighting. This light can be customized with lead lengths, connectors, and various color options.



### Some Highlights of the BW-A210 Round Dome Light:

- MIL-STD-810G
- MIL-STD 361F (CE102, RE102)
- IEC61000-4-2
- 28 Vdc @100 mA (0 to 100% thru PWM input)
- Operating temp -40 to 50 Degrees C
- Overvoltage, transient, and reverse polarity protection
- Constant light output during any 18 to 34 Vdc swings
- NVIS, WHITE, IR, and other color options
- MIL-STD-3009 NVIS white compatible LED lighting
- IP67 rated



desired. (Many voltage options are available)

## DUAL MODE NVIS PWM LIGHTING

Blue Wolf's DUAL Mode NVIS 4 inch pod lights is fully rotatable thru 320 degrees, can be fixed in place, and can be fully dimmed from 0 to 100% through a 3rd wire PWM signal.

One half of the light provides NVIS compliant lighting while the other half provides standard WHITE lighting. Each side of the light can be independently turned ON or OFF as desired. With 10 LED's on each side, the light output is also fully dimmable from 0 to 100% through a single PWM control wire that controls both sides of the light. Having two options for lighting in a single lighting fixture help to reduce costs, installation time, and over all maintenance. No wires seen with this light as they all pass through the end mounting cap to present a nice, clean, and ergonomic panel mount lighting product. Additionally, this light is specifically

## UNIVERSAL POD and POST CAP LIGHTING

During any NVG or NVIS lighting upgrade or addition, it is necessary at times to provide additional interior cabin or instrumentation lighting that is NVIS compatible. Blue Wolf's line of small Pod and Post cap LED products provide plentiful options for any lighting configuration. They're designed using rugged aluminum so they won't break if accidentally hit and they are available in other NVG, or standard color options if







designed to provide a "constant level" of light output during any voltage swing from a 18 to 32 Vdc. Do you need a custom designed light? See our Engineering Section.

## UNDERWATER LED LIGHTING

The TITAN is the latest, highest quality 316 stainless steel underwater LED light. This nine LED configuration marine light produces an output of 2,637 lumens, making it one of the brightest underwater LED lights on the market today. The TITAN was designed for permanently submerged offshore vessels, and boats used in coastal marine environments and/or industrial underwater lighting applications. Available in different color options, IP68 rated and depth tested to 200 ft.

We also have complete underwater LED dock lighting kits for any needed permanent or temporary underwater led lighting application needs. Available for both Freshwater and Saltwater applications, our LF5 Series of underwater LED lights are capable of running off of 24 VAC or 24 VDC. The system is an easy plug and play series for up to 14 lights.



## ENGINEERING AND CUSTOM DESIGN

Blue Wolf can carefully evaluate the nature of your request, including objectives, budgets, goals, timelines and overall expectations. Blue Wolf then provides a solution-based plan that ensures your mechanical, electrical, or prototyping needs are effectively integrated to produce a highly functional and operative product. Our vast experience enables us to tailor this process to several applications and we are confident that we can assist you with your request.

With over 50+ years of Engineering and Manufacturing experience, Blue Wolf can assist with almost any custom design project. We provide a broad range Product Engineering and Prototyping Services. This includes Mechanical and Electrical Turn-Key design services such as:

- Printed Circuit board design (PCB)
- Mechanical Machine Design
- 3D Modeling drawings
- Electrical Schematics
- Automation Equipment
- Microprocessor firmware design
- BOM and production documentation
- Pre-Production Prototypes
- Complete Production ready Print packages
- 3D Printing (ABS and PLA)

Our solutions are innovative and economical, while at the same time being based on industry knowledge and key manufacturing processes. There is always a solution.





# FUTURE RESILIENCE

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AND EMERGENCY SERVICES PROFESSIONAL

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Future Resilience Africa is an innovation platform for the risk, disaster and emergency sectors. It is attended by people who plan for, and deal with, natural and man-made disasters. The event goal is to promote urban resilience, which enables the preparation, response and recovery to these occurrences.



## Who will be there

As an exhibitor at Future Resilience Africa, you will get to showcase your products and services to key influencer's in the sector, such as;

- Emergency Medical and First Responders
- National and Provincial Disaster Management
- Law Enforcement
- Search & Rescue
- Insurance and Risk Advisories
- NGOs
- Academia
- National Infrastructure
- National, Provincial and Municipal Government

## Why exhibit:

- Be part of a global marketing campaign in the promotion of the event
- Showcase your products and services to a qualified and targeted audience
- Position your brand in a competitive market
- Access key decision makers in emerging markets
- Engage directly with end users and specifiers
- Develop relationships with local partners (for international companies)
- Gain key insights into policy and procurement strategies in the region
- Take advantage of numerous speaking and networking opportunities

## For Sponsorship or exhibition opportunities please contact

Stephan Herman  
stephan.herman@spintelligent.com or  
021 700 3598 or 076 534 9110

**Spaces are limited – book  
today to secure your place!**



# Noptel

## DEVELOPMENT & MANUFACTURE OF INNOVATIVE APPLIED OPTOELECTRONIC SOLUTIONS

Founded in Oulu (Finland) in 1982, the NOPTEL Company specializes in the development and manufacture of innovative applied optoelectronic solutions. Noptel's product line encompasses two major areas: Laser rangefinders and optical alignment and displacement measurement products.



NOPTEL employs thirty persons and has been a subsidiary of the Belgium-based FN HERSTAL since 2011. Today, NOPTEL's expertise as a key player in developing military qualified and military proven optoelectronic applications is well established.

## Noptel Shooting Training Device

The Noptel Expert is an optical shooting training device for shooting skills training. It is used indoors with scaled-down targets and simulated shooting distances, or at shooting range with life-size targets and longer shooting distances. It measures rifle movement, detects the shot, shows the location of both the hit and miss, and analyses the shooter's performance. The Expert software shows the rifle movement during the aiming and triggering, and the score right after the shot.

- Fully portable: training anywhere and anytime
- Ready to use in minutes
- Mounting to most rifles
- Immediate shot analysis and feedback by Noptel Expert software
- Wireless operation
- Rugged Construction, indoor and outdoor use
- Training at simulated distances
- Training at long distances (shooting range)
- Always safe: no live ammunition  
Noptel Long Distance Range Finding

The compact, eye safe and highly integrated laser rangefinders can be used as OEM products in different applications.

- Airborne, land, maritime and naval systems
- Vehicle mounted reconnaissance systems
- Observation and surveillance systems
- Handheld targeting systems
- Future soldier program equipment
- Fire control systems
- Mobile range finding
- Location measurement

Noptel rangefinders can be delivered as open modules or in nitrogen-filled, watertight casings enabling flawless operation under harsh environmental conditions. The robust hand held devices measure distances beyond 10 km.





# Greenray's New T1241 TCXO



## Ultra-low g-Sensitivity *and* Low Phase Noise for Mobile and Airborne Apps.

Greenray Industries' new T1241 TCXO has been designed for use as a reference for those **military and instrumentation** applications that require **ultra low G-sensitivity and reliable, superior phase noise performance** in high vibration and shock sensitive environments.

The T1241 is available from 50 to 100MHz and delivers **reduced acceleration sensitivity** down to  $7 \times 10^{-11}$ /g of applied acceleration force. Typical phase noise is -155 dBc/Hz (@10 kHz).

The T1241 features a rugged, SMT package and supply voltage of +3.3 or +5Vdc. EFC for precise tuning or phase locking apps is standard. Input current for the T1241 is 30mA max.

For more information about our full line of high performance oscillators, visit Greenray online at [www.greenrayindustries.com](http://www.greenrayindustries.com).

T1241 TCXO



Frequency	50 - 100MHz
Output	Squarewave, CMOS
Phase Noise	-155 dBc/Hz (@10 kHz)
Aging	≤1.0 ppm/year
Size	.68 x .68 x .20 in.



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# Greenray's New YH1485 OCXO



## Ultra-low Phase Noise Reference for Mission Critical Apps.

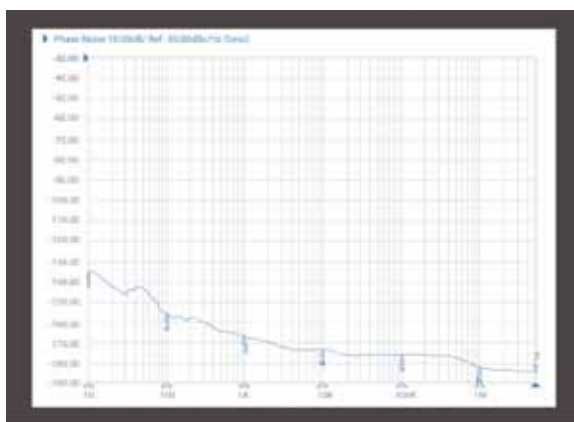
Greenray Industries' new YH1485 OCXO is designed for use as a reference for **radar, instrumentation, and military** applications that require **very low phase noise** in order to optimize system sensitivity.

The ultra-low phase noise YH1485 delivers **phase noise performance below -180dBc/Hz** and **excellent short and long term stability** for reference requirements.

The YH1485 features a 1" square hermetic package and supply voltage of +15 or +12Vdc. Optional **reduced acceleration sensitivity** – down to  $3 \times 10^{-10}/g$  in the worst axis – is also available to satisfy high shock or vibration environments and improve performance.

For more information about our full line of high performance oscillators, visit Greenray online at [www.greenrayindustries.com](http://www.greenrayindustries.com).

See for Yourself:



YH1485 Phase Noise @ 10MHz



YH1485

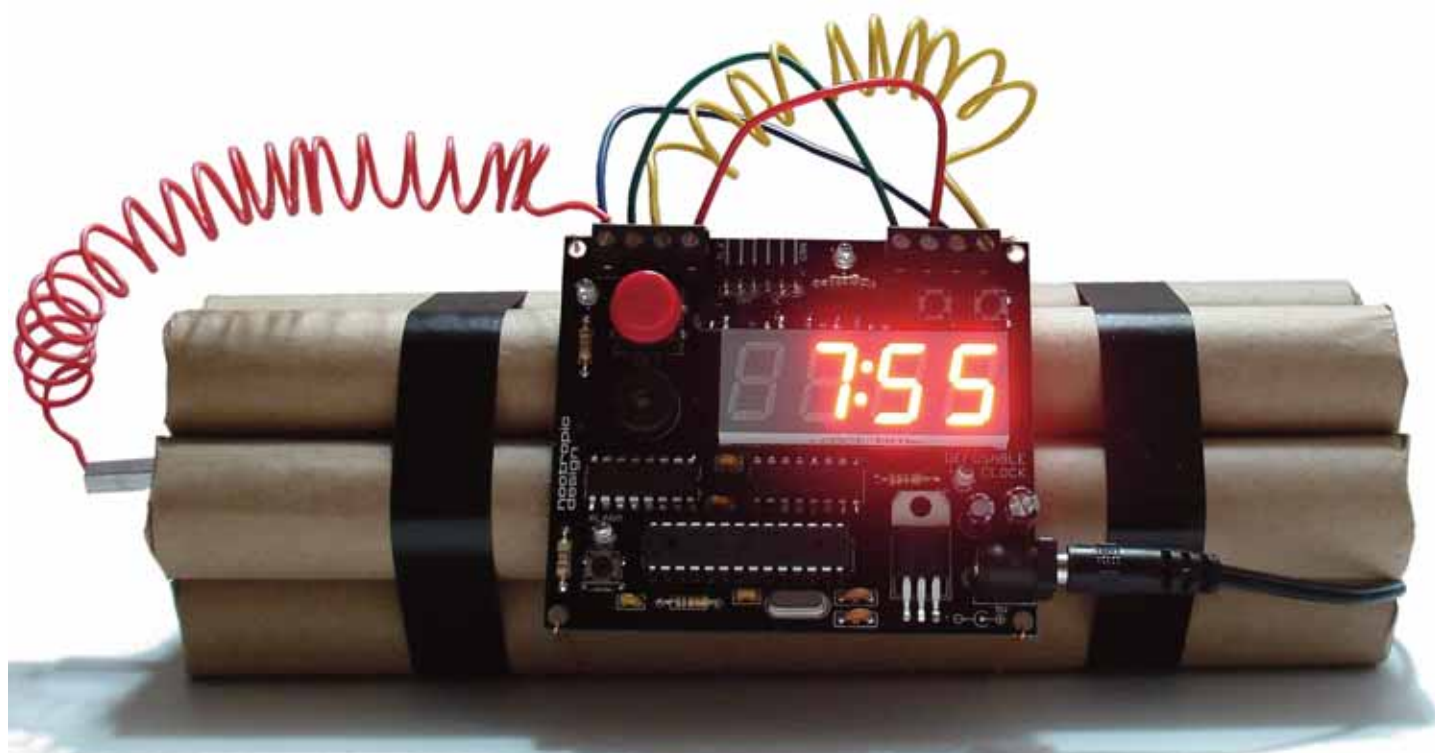
Frequency	10 - 120MHz
Output	+10dBm Sinewave
Best Stability	±0.05ppm
Phase Noise	-180 dBc/Hz
Size	25.4 x 25.4 x 12.7mm



For Industry, for Defense. **Greenray.**



# Introducing the IFIED; the evolution of Improvised Explosive Device training aids



IED. Improvised  
Explosive Device.  
Explosion.  
Detonation.  
Destruction.

These are just a few words which cause fear and panic into the vast majority of populations, not only in the United States, but around the world. IEDs have been around for centuries but only recently, in the past 15 years, have they become common prose in conversations. Since the invention of black powder people have been making bombs. From the first recorded terrorist

plot in 1605, in England, when Guy Fawkes attempted to blow up Parliament, to the first recorded bombing in the United States in 1905, IEDs have played a significant role throughout history. These types of terrorist attacks utilizing improvised explosive devices have become consistent in modern warfare, showing only a pattern of growth and increased sophistication.

Today, it is not a question of "if" a soldier or first responder will encounter an IED; it is a matter of "when". There are many different ways to train, prepare and guard against these threats. Realistic training is the best method available. To be able to train with the best tools, advanced techniques, and training aids which resemble and function similar to those one might encounter on a real mission, bring the training value to a level that will prepare personnel

mentally and physically for the tasks they will encounter.

Since 1999, Explotrain has provided blast simulators for realistic training on multiple platforms. From handheld capabilities to resounding explosive simulations comparable to artillery, Explotrain has remained faithful to their name. During the past year, Explotrain has expanded the scope of their training to coincide with the existing blast simulators. Inert Functional Improvised Explosive Devices (IFIED™s) are designed and built by Explosive Ordnance Disposal technicians for realistic training scenarios. These devices are based on real-world IEDs from both domestic and international incidents. The IED training aids can be triggered by various methods; from a basic victim-operated pressure plate to a complex

time, command, and environmentally initiated device.

The Inert Functional Improvised Explosive Device (IFIED) branch of Explotrain provides up-to-date training aids which interface with the blast simulators, but also function as stand-alone devices to maximize training effectiveness. IFIEDs are versatile when it comes to training scenario diversity. Because the possibilities and types of IEDs are only limited on the imagination of the builder or visionary, the variety of training aids Explotrain offers can be tailored to meet specific needs. Whether an urban overseas (OEF/OIF) device, jungle-based (South/Central America) devices, or highly sophisticated devices mimicked after previously used IEDs in the United States, there is a little bit of everything to choose from when designing a training plan. Hone skills on a hostage vest or refresh muscle memory with various types of victim-operated devices. The capabilities of Explotrain's devices are not limited by standard IED conformity. The ability to create new types of IED training aids with which an EOD operator can train and develop new tactics to counter emerging threats is the ultimate objective.

The IFIEDs are not limited to training just Explosive Ordnance Disposal technicians, but are effective training tools for any person who may encounter improvised explosive devices or booby traps. Some of these types of personnel can include, but are not limited to, police officers, engineers, emergency medical technicians, SWAT, firefighters, infantry, heavy equipment operators, special operations, and more. IEDs are not only an overseas threat, but also domestically, such as the Boston Marathon bombing in 2013 and as many clandestine labs for drugs and explosives are a danger to any first responders.



The stand-alone capability of any IFIED relies on an audible alarm built into the circuitry of each device. If the IFIED is triggered by any of the switches for a particular device, the alarm will sound, indicating the IED would have detonated. Alternatively, the option of integrating any of the simulators is done by means of Explotrain's X-CAP™ blasting cap simulator. The X-CAP allows the device to interface with any of Explotrain's blast simulators, wirelessly, up to 100 meters line-of-sight. Multiple simulators and devices can also be used simultaneously. These capabilities and features allow the instructor to seamlessly train multiple individuals or teams during the same cycle. X-CAPS are virtually indistinguishable from real electric blasting caps in length, diameter and overall visual aptitude. They are used in-place of an inert or dummy blasting cap with no additional wiring required, making integration into any IFIED a quick and efficient upgrade.

The value of having an Explotrain IFIED and blast simulator combination for training is based on the evidence provided as feedback. Many accounts of EOD technicians and first responders suggest the impact an explosive

simulation has over the traditional buzzer penalty. The realism of Explotrain's IFIEDs eliminates the unnecessary components often incorporated into traditional training aids. Students and personnel will not second guess what is viewed on an x-ray, making the IFIED training aids a "you see what you see" and not a "that's not part of your problem." When the reactions to a blast simulator versus a buzzer alarm are, "Damn! That will make them pay attention", the perspective is emphasized exponentially. Students and personnel often become complacent during training. Some students and personnel do not take training seriously and thusly become lax with repetitious incidents. When Explotrain's IFIEDs and simulators are added to the training plan, the "training is, without a doubt, being taken seriously." The ability to create psychological training scars students will remember may keep them and their teammates alive if a similar situation is encountered on a mission, response, or incident.





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# IFS supports Affinity in UK MOD Military Flying Training System

IFS Applications 9 and IFS Managed Cloud on Microsoft Azure to support Affinity Flying Training Services managing aircraft maintenance for pilot training as part of wider £1.1 billion UK Ministry of Defence investment into modernisation of fixed-wing military flight training.

IFS, the global enterprise applications company, announces that Affinity Flying Training Services has chosen IFS Applications™ 9 and IFS Managed Cloud™ as one integrated solution for aircraft maintenance and Enterprise Resource Planning (ERP). The agreement with IFS, including licenses,

is valued at approximately £1.2 million for the first six years of the 18-year contract.

Affinity Flying Services Limited secured a GBP500 million (USD721 million) contract in February to provide the UK Ministry of Defence (MOD) and its Ascent Flight Training partner with the aircraft for the fixed-wing portion of the UK Military Flying Training System (UKMFTS) programme.

Affinity, an Elbit Systems and Kellogg Brown & Root joint venture, will replace legacy MOD fleets with 38 modern training aircraft as well as simulators and classroom learning for aircrew across the Royal Air Force, Royal Navy Fleet Air Arm, and Army Air Corps. The contract includes the designing, delivering, and managing of the fixed-wing training service until 2033 and is expected to provide around 200 new jobs across training bases in the UK.

As part of this, IFS Applications 9 and the IFS Managed Cloud solution will provide Affinity

with maintenance, repair and overhaul (MRO) and ERP software for the business as an end-to-end solution - supporting aircraft operations and maintenance, supply chain, HR, and finance. Affinity will provide a fixed-wing training aircraft and maintenance to support UK fixed-wing military flying training to deliver an optimised training service and ensure availability of Grob G 120TP 'Prefect', Beechcraft 'Texan' T-6C and the Embraer 'Phenom' 100 training aircraft.

"Affinity plays a key part in the seamless progression of military personnel through fixed-wing flying training and, with the help of IFS, will help support a more modern and efficient training pipeline for UK aircraft pilots," Ian Chalmers, Managing Director at Affinity Flying Training Services said. "The IFS solution is a perfect fit for us as it provides an agile and responsive system to better ensure the maintenance and availability of our aircraft for the duration of our partnership with Ascent and the MOD, as well as supporting the running of our JV business."





## About IFS

IFS™ is a globally recognised leader in developing and delivering enterprise software for enterprise resource planning (ERP), enterprise asset management (EAM) and enterprise service management (ESM). IFS brings customers in targeted sectors closer to their business, helps them be more agile and enables them to profit from change. IFS is a public company (XSTO: IFS) founded in 1983 and currently has over 2,800 employees. IFS supports more than 1 million users worldwide from its network of local offices and through a growing ecosystem of partners. For more information visit: [www.ifsworld.com](http://www.ifsworld.com).

IFS aerospace and defence industry director Graham Grose said, "We are delighted to have been selected to be part of this important £500 million MOD and Ascent Flight Training investment for fixed-wing training. The solution provides Affinity with a powerful and easily deployed service to streamline the maintenance process of aircraft and to focus on training the future generation of military aircraft pilots. By using the solution, Affinity can maintain the aircraft and prepare future UK aircrew for duty, as well as making sure strict airworthiness and safety standards are met alongside the running of the business from day to day with traditional finance, HR and procurement."

## About Affinity

Affinity supports UK military air capability by playing a key part in the seamless progression of pilots through flight training. Under a landmark partnering program with Ascent and the Ministry of Defence, Affinity supplies and supports three fleets of aircraft within the UK Military Flight Training System (UKMFTS). We support a training pipeline that is more modern, effective and efficient. As a result, UK military aircrew will be better prepared for duty. Through technical advancement and commercial innovation, we deliver aircraft to match the training needs of the next generation on the frontline. [www.affinityfts.co.uk](http://www.affinityfts.co.uk).



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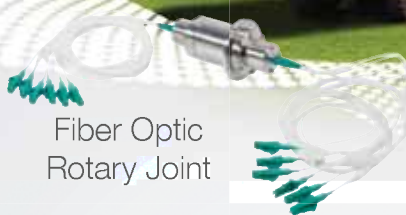
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Innovation is a key attribute of the success of Qioptiq. With world class capability in design, coupled with international award winning technical achievement, Qioptiq has demonstrated repeatedly an ability to convert technical innovation into producible cost-effective designs. This year at Eurosatory we will be once more demonstrating this capability.

We will show a number of advanced products including the new range of Thermal continuous zoom cameras to service the ground vehicle, border surveillance and anti-aircraft markets. HADES is the latest ruggedised solution for challenging long range requirements with a rapid, continuous zoom function allowing surveillance of vast areas. PanthIR is a 10:1 continuous zoom camera for mast mounted surveillance and remote weapon station applications. CouglR is a 6:1 continuous zoom camera for targeting and short range surveillance. PumIR is the next generation of dual field of view zoom lens assemblies, compatible with the latest generation of 17 $\mu$ m and 12 $\mu$ m uncooled focal plane arrays. Designed for use with all commonly used sensor engines.

We will also have our latest dismounted sighting solutions. KITE IN LINE is an in-line Image Intensified weapon sight designed for use in military environments and excelling in the night vision 'clip on' market due to an unrivalled combination of optical performance, size and weight. SAKER is a high performance in-line fused weapon sight combining image intensified and thermal imaging technologies to deliver enhanced 24 hr capability.

# The Future in sharp focus for Qioptiq

We will also show a spread of capability in sensing and detecting including the HARLID High Angular Resolution Laser Irradiance Detector. The Excelitas' HARLID™ platform is designed for use in Laser Warning Receiver Systems to detect and provide precise angle-of-arrival (AoA) information from direct and indirect scattered light from laser range finders, target designators, and active laser Electro-Optic (E.O.) systems.

Craig Taylor, Qioptiq, commented: "Capturing new technological developments and successfully exploiting them is not a new concept. However, what is important is constantly considering new opportunities and adapting our approach. In a changing market, what's important for our customers is our ability to deliver world-leading products that are effective, efficient and adaptable."





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# The Will-Burt Company Introduces Stiletto® AL at Eurosatory 2016



Stiletto AL is an extremely stable and compact alloy mechanical telescoping mast for critical sensors and antennas.

The Will-Burt Company, the world's leading manufacturer of mobile elevation solutions, will introduce the Stiletto® AL electro-mechanical telescoping mast at this year's Eurosatory exhibition June 13 – 17.

The product's debut will be in Paris, France at the USA pavilion stand D578.

The Stiletto family of electro-mechanical telescoping masts are known to provide superior pointing accuracy and stability along with high payload lifting capability. The Stiletto and Stiletto HD are lightweight due to the use of composite materials in their construction and have been used in military and commercial applications around the world for a number of years. The new alloy constructed Stiletto AL delivers the same precise pointing accuracy and payload management capabilities as the Stiletto composite mast and is well suited for military and commercial applications.

“The desire to deliver unparalleled performance with a cost-effective elevation platform drove the creation of Stiletto AL,” said Jeffrey O. Evans, President, CEO and Chairman of The Will-Burt Company. “The feature set we have been able to incorporate into this telescoping mast appeals to a broad customer base, both in commercial and military markets, and is capable of meeting a wide variety of critical program requirements.”

**The MIL-STD 810 compliant Stiletto AL was designed with several innovative features.**

- Does not require guying and is self-supporting with high-strength alloy construction
- Minimal mast twist with energized keyway guides
- Low wind deflection delivered with constricting wear bands
- Quiet operation from a DC motor driving an environmentally sealed direct-drive system
- High payload lifting capacity up to 158 kg with patent pending automatic quiet locks
- Heights from 4 to 15 meters
- Reduced maintenance from a clean air filter system that prevents dirt from entering mast
- Easy and precise operation with integrated PC controls





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