A complete range of rugged solutions

mildef

The MilDef Group

Many specialties. One partner.

The MilDef Group brings together a complete range of rugged electronics expertise in one supplier. From compact computers to switches and monitors, MilDef has specialized experience in each of the key technologies needed for a powerful communications solution to perform in even the harshest conditions.

MilDef offers a comprehensive range of products that have been proven on land, at sea and in the air with international forces around the world. These products include high-performance modular computer systems, notebooks, PDAs, tablets, displays, power supplies and the groundbreaking 19"/2® form factor.

Since MilDef designs and manufactures all of their products, the company is highly flexible in both enhancing standard products and designing custom solutions for specific needs.

Service and support anytime, anywhere

MilDef's presence spans the entire globe, either directly or through partners. This presence means MilDef can offer an unrivalled service and support package for rapid solutions any time they're required.

The MilDef service offer includes:
- A dedicated in-house service team
- Guaranteed product servicing up to 5 years after end of sale
- Free telephone and email support for the lifetime of all products
- A standard 2-year warranty on all products, which can be extended if required
- Repair and return of a product within 10 working days of arrival
- An extensive burn-in program before delivery to ensure quality and function match all requirements.

Rugged computers

Maintain good communication in difficult conditions

Military operations often take place in difficult conditions: in the desert heat or arctic cold; in tropical rain or humid jungles; and in arid sandy plains. Not only must computer equipment withstand such tough conditions, but also the shocks and vibration common in military situations.

MilDef is well aware of what defence forces have to face in various theatres of operation, and is dedicated to developing and supplying a variety of rugged computers that help military personnel maintain good communication wherever they are.

An extensive range

We offer an extensive range of rugged computers and associated equipment as presented in this brochure. Most of the units are ideal for use by army, navy and air force personnel, although ground forces represent the biggest application area. MilDef units are found in ground vehicles such as tanks, armed personnel carriers and smaller road vehicles. They are also used in staff headquarters, field tents, and by all ground forces.

As we can satisfy virtually all of your computer equipment requirements, MilDef is the only contact that you need.

Mobile solutions

MilDef products ensure maintaining high situational awareness and the tactical advantage in a combat zone. For example, our MilDef DE13 is a combat-rugged slim tablet built to be used in harsh conditions as a soldier device or in military vehicles and naval vessels, running military applications such as BFT, BMS client and FAC.

The MilDef DE13 is equipped with all the technology you need in such situations and can be customized to meet customer requirements. It has high brightness LCD multi-touch screen, and complies with several common standards, including MIL-STD-810G, MIL-STD-461G and IP67.

Customized units

As MilDef is a flexible and very service-minded company, we respond quickly to customer demands. We can rapidly customize units to exacting standards and deliver them within tight time frames, whether it only concerns a few tailored products or hundreds of units. Computers can be modified and equipment connectors changed to suit your complete system. In addition, our accessories enhance the performance of our computer equipment. Naturally, they are designed for tight integration with our products.

As you would expect, our development department uses the latest technology in the design, development and manufacture of our product range and in custom-izing computers for our customers.

We have our own EMI chamber where we can test products and verify their performance after modification or upgrades.

Compliance and Military Standards

As we are familiar with the extreme conditions under which military computer equipment operates, we use only the high-quality designs and materials necessary to protect and maintain long-term functionality and reliability. We are certified according to ISO 9001:2015 regarding design, development and production. We are also ISO 14001:2015 certified, and our care for the natural environment forms an important part of our business strategy.

All our units are built to comply with tough military standards to further ensure their high performance over long equipment lifecycles. They are, at a minimum, true IP54 products as well as fulfilling MIL-STD-810 and MIL-STD-461.

Sustainable products

A key consideration taken into account when designing new equipment is to make it sustainable and highly reliable. This satisfies the demand of defence equipment purchasers for the long-term stable supply of particular types of equipment. Such sustainability also matches the long lifecycles of most military vehicles and aircraft, and the need to continually update systems. Typical MilDef features that promote sustainability and cost-effectiveness are a form factor that remains the same even if computers are updated, a computer lifecycle of up to ten years, and lifetime support for all MilDef units.

Handhelds

MilDef DE13

Specifications:
CPU: Intel® Core™ i7-7Y75
(4M Cache, up to 3.60GHz)
Display: 7" 1280 × 800, LED backlit
Display brightness: 780 nits
Touch-screen: Resistive multi-touch
Memory: 16GB DDR3 1066MHz
Storage: M.2 2280 M key SATA III SSD
G**raphics:** Intel® HD Graphics 615
Battery: 7.4V Li-ion (4400mAh)
Sensors: Light sensor
Audio: HD Audio and mono speakers, embedded digital mic
Operating System: Windows 10
Temperature operational: −20°C to +60°C (−4°F to 140°F)
Temperature storage: −40°C to +70°C (−40°F to +158°F)
Dimensions (W × D × H): 250 × 144 × 30.5 mm
(11.0 x 5.67 x 1.20 in) w/ rubber bumpers
Weight: 1.15 kg (2.54 lb) w/ battery
Compliant to: CE, FCC, WEE, REACH, RoHS2.0, IP67,
MIL-STD-810G and MIL-STD-461G

Ports and connectors:	Options and accessories:
1×USB 3.1 Type C	1×USB 2.0 (Fischer)
1×Docking connector (POGO)	1×Display Port (Fischer)
2×Ext ANT signals	1×Giga LAN (Fischer)
1×3-pin DC-in (Fischer)	1×Serial RS232/422 (Fischer)
	1×Headset (Fischer)
	WLAN 802.11 a/b/g/n/ac
	BT 4.2
	GPS
	Invisible mode
	TPM 2.0
	−30°C/-22°F Operating Temperature
	Hot swappable 2nd battery 7.4V Li-ion (4400mAh)
	MIL-STD-461G − Ground Navy
	MIL-STD-461G − Ground Army

MilDef DB7

Specifications:
CPU: Intel® Atom™ E3825 (1M Cache, 1.33GHz)
Display: 5" 800 × 480, LED backlit
Display brightness: 340 nits
Touch-screen: Resistive single-touch
Memory: Up to 8GB DDR3L 1067 MHz
Storage: mSATA II SSD up to 256GB
Graphics: Intel® HD Graphics for Intel Atom® Processor Z3700 Series
Battery: 3.7V Li-ion (3900mAh)
Audio: HD audio codec and amplifier, Mono Speaker 0.5 W, Embedded Digital mic
Operating System: Windows 7, 10 and Linux depending on configuration
Temperature operational: −20°C to +60°C (−4°F to +140°F)
Temperature storage: −40°C to +70°C (−40°F to 158°F)
Dimensions (W × H × D): 202 × 98 × 40 mm
(7.95 × 3.86 × 1.57 in) w/ bumper
Weight: 760 g (1.68lb) w/ battery
Compliant to: CE, FCC, WEEE, REACH, RoHS2.0, IP65,
MIL-STD- 810G and MIL-STD-461F

Ports and connectors:	Options and accessories:
1×USB 2.0	1×Audio & mic (Hirose)
1×SD card	1×USB (Hirose)
1×SIM Card	1×Giga LAN (Hirose)
1×DC-in (built-in 12–32 V DC)	1×RS232 (Hirose)
1×Docking connector (1×USB 2.0 Host: 1×VGA, 1×DC-in)	1×Docking Connector Giga LAN, USB, RS232, RGB
	WLAN 802.11 a/b/g/n
	Bluetooth 4.0 (BLE)
	GPS
	TPM1.2
	Multi-battery charger
	Double capacity battery 7.4V (7800mAh)

MilDef DF8A

Specifications:
CPU: Freescale ARM Coretex-A9 i. MX6 Quad Core 1GHz
Display: 5" 480 × 800, LED backlit
Display brightness: 400 nits
Touch-screen: Capacitive multi-touch
(Optional: resistive single-touch)
Memory: 2GB RAM, 32GB ROM
Battery: 3.7V Li-ion (3520mAh)
Sensors: Magnetic, Gravity, Gyro, Proximity & Light
Operating System: Android™ (4.4.3 Jelly Bean or 7.1.1 Nougat)
Temperature operational: −20°C to +60°C (−4°F to 140°F)
Temperature storage: −40°C to +70°C (−40°F to 158°F)
Dimensions (W × H × D): 90 × 169 × 24.5 mm (3.54 × 6.65 × 0.96 in)
Weight: 505 g (1.11 lb) w/ battery
Compliant to: CE, FCC, WEEE, REACH, RoHS 2.0, IP66,
MIL-STD-810G and MIL-STD-461F

Ports and connectors:	Options and accessories:
1×Micro SD	GPS
1×DC-in 5V	WLAN 802.11 b/g/n
	Bluetooth 4.0
	1×Audio/RS232/USB/VGA/LAN (Fischer)
	1×GPS antenna (SMA)
	1×WLAN/BT antenna (SMA)
	1×Docking connector USB, RS232, LAN (POGO)
	1×DC-in 10-32V DC (Lemo)
	Double capacity battery 3.7V (7040mAh)

MilDef Mobilite DT

Specifications:
CPU: Intel® Core™ i7-7600U
(4M Cache, up to 3.90GHz)
Memory: Up to 16 GB DDR4 2133 MHz
Storage: Removable 2.5" SATA III SSD
Graphics: Intel® HD Graphics 620
Battery: 10.8V Li-ion (5800mAh)
Operating System: Windows 10
Temperature operational:
−20°C to +50°C (−4°F to +122°F)
Temperature storage: −40°C to +70°C (−40°F to +158°F)
Dimensions (W x D x H): 250 × 190 × 45.2 mm
(9.84 x 7.48 x 1.78 in) w/ bumpers
Weight: ~2.3 kg (~5.07 lb) w/ battery
Compliant to: CE, FCC, WEEE, REACH, WHLK, IP54,
RoHS2.0, MIL-STD-810G and MIL-STD-461F

Ports and connectors:	Options and accessories:
1×Serial (DB9)	GPS
2×USB 3.1 Type A	Bluetooth 5.0
1×RJ45 Giga LAN	WLAN a/b/g/n/ac
1×Docking connector (COM2/3, USB2.0, Mic, Speaker, Line-in, VGA, PS2, DVI, Giga LAN)	Docking station (Docklite 10)
1×MIL DC-in 12–32 V	Stand for vehicle mounting
1×2nd battery connector	2nd battery 10.8V Li-ion (8700mAh)
Multibay w/ 1× ExpressCard Slot & 1×SIM Card/SD Card slot	TPM2.0
	−30°C/-22°F Operating temperature

Tablets

MilDef DS13

Specifications:
CPU: Intel® Core™ i7-7Y75
(4M Cache, up to 3.60GHz)
Display: 10.1" 1920 × 1200, LED backlit
Display brightness: 770 nits
Touch screen: Resistive multi-touch screen
Memory: 16GB DDR3 1866MHz
Storage: mSATA III SSD up to 512GB
Sensors: Light sensor, accelerometer/magnetometer/gyroscope
Graphics: Intel® HD Graphics 615
Battery: 11.1V Li-ion (4200mAh)
Audio: HD Audio and mono speakers, embedded digital mic
Operating System: Windows 10
Temperatures operation: −20°C to +60°C (-4°F to 140°F)
Temperature storage: −40°C to 70°C (-40°F to +158°F)
Dimensions (W × D × H): 280 × 186 × 20 mm
(11.0 x 7.3 x 0.8 in) w/o rubber bumpers
Weight: 1.39 kg (3.06 lb)
Compliant to: CE, FCC, WEE, REACH, RoHS2.0, IP65,
MIL-STD-810G and MIL-STD-461F

Ports and connectors:	
1× RJ45 Gbit LAN	1× GLAN/Mini DisplayPort/USB 3.0
(trade-off DisplayPort)	1× USB 2.0 (Fischer)
1× Mini DisplayPort	1× VGA (Fischer)
2× USB 3.0	2× COM (Fischer) (RS232 x2 or
1× Docking connector (POGO)	RS232 x1/RS422 x1)
1× Micro SD	1× GLAN (Fischer)
1× SIM Card Slot	1× Audio (Fischer)
1× DC in 12–32 V	1× Sealed Headset (Fischer)
	TPM 2.0

Options and accessories:	
WiFi 802.11 a/g/n	−30 °C Operating Temperature
BT 4.0	−40 °C Operating Temperature
GPS	Dual GLAN Card
Invisible mode	Double capacity battery
AMG sensor	11.1 V Li-ion (8400mAh)

MilDef DT13

Specifications:
CPU: Intel® Core™ i7-7600U
(4M Cache, up to 3.90 GHz)
Display: 9" 1280 × 768 LED backlit
Display brightness: 700 nits
Touch screen: Resistive multi-touch
Memory: Up to 16 GB DDR4 2133 MHz
Storage: Removable M.2 2280 SATA III SSD 256 GB / 512 GB
Keyboard: 62 keys with LED backlight
Graphics: Intel® HD Graphics 620
Battery: 10.8V Li-ion (5800mAh)
Operating System: Windows 10
Temperatures operational: −30°C to +50°C (−22°F to +122°F)
Temperature storage: -40°C to +70°C (-40°F to +158°F)
Dimensions (W x D x H): 250 × 190 × 45.2 mm
(10.2 x 7.5 x 1.7 in)
Weight: ~2.5 kg (~5.50 lb) w/ battery
Compliant to: CE, FCC, WEEE, REACH, WHLK, IP65, RoHS2.0,
MIL-STD-810G and MIL-STD-461F

Ports and connectors:	Options and accessories:
1× Serial (DB15)	GPS
(COM1: RS232/422/485 BIOS	Bluetooth 5.0
Selectable + COM3 RS232)	WLAN a/b/g/n/ac
2× USB 3.1 Type A	Docking station (DockLite 10)
1× USB 3.1 Type C	Stand for vehicle mounting
1× RJ45 Giga LAN	2nd battery 10.8 V Li-ion (8700mAh)
1× Docking connector	Night vision
(120 pins)	TPM 2.0
1× MIL DC in 12–32 V	MIL-STD-461G Ground Army
2nd battery connector	
Multibay w/ 1× ExpressCard	
Slot & 1× SIM Card/SD Card slot	

MilDef DR13

Specifications:
CPU: Intel® Core™ i7-7600U
(4M Cache, up to 3.90GHz)
Display: 8.4" 1024 × 768 LED backlit
Display brightness: 730 nits
Touch screen: Resistive single-touch
Memory: Up to 16 GB DDR4 2133 MHz
Storage: Removable 2.5" SATA III SSD
Graphics: Intel® HD Graphics 620
Battery: 10.8V Li-ion (5800mAh)
Operating System: Windows 10
Temperature operational: −20°C to +50°C (-4°F to +122°F)
Temperature storage: −40°C to +70°C (-40°F to +158°F)
Dimensions (W x D x H): 250 × 190 × 45.2 mm
(9.84 x 7.48 x 1.78 in) w/ bumpers
Weight: ~2.3 kg (~5.07 lb) w/ battery
Compliant to: CE, FCC, WEEE, REACH, WHLK, IP54, RoHS2.0,
MIL-STD-810G and MIL-STD-461F

Ports and connectors:	Options and accessories:
1× Serial (DB9)	GPS
2× USB 3.1 Type A	Bluetooth 5.0
1× RJ45 Giga LAN	WLAN a/b/g/n/ac
1× Docking connector	Docking station (DockLite 10)
(COM2/3, USB 2.0, Mic, Speaker,	Stand for vehicle mounting
Line-in, VGA, PS2, DVI, Giga LAN)	2nd battery 10.8V Li-Ion
1× MIL DC-in 12–32 V	(8700mAh)
1× 2nd battery connector	TPM2.0
Multibay w/ 1× ExpressCard Slot	Night vision
& 1× SIM Card/SD Card slot	Invisible mode
	-30°C/-22°F Operating temperature

Notebooks

MilDef RS13

Specifications:
CPU: Intel® Core™ i7-7600U (4M Cache, up to 3.90 GHz)
Display: 13.3" 1920 × 1080 LED backlit
Display brightness: 400 nits
Memory: Up to 16 GB DDR4 2133 MHz
Storage: 2.5" SATA III SSD (removable)
Graphics: Intel® HD Graphics 620
Battery: 11.1V Li-Polymer (6040mAh)
Input devices: 83-key backlit keyboard, resistive single-touch touchpad
Audio: HD Audio and stereo speakers, embedded digital mic
Operating System: Windows 10
Temperatures operational: −20°C to + 60°C (-4°F to +140°F)
Temperature storage: −40°C to +70°C (-40°F to +158°F)
Dimensions (W × D × H): 338 × 265 × 31.5 mm (13.31 × 10.43 × 1.24 in) w/ bumpers
Weight: 2.5 kg (5.51 lb) w/ battery
Compliant to: CE, FCC, WEEE, REACH, IP65, WHLK, RoHS2.0, MIL-STD-810G and MIL-STD-461G

Ports and connectors:		Options and accessories:	1× Docking connector (POGO)
1× Display port or VGA port	1× USB 3.1	1× 2nd RJ45 Giga LAN	TPM2.0
1× SIM Card Slot	1× RJ45 Giga LAN	1× Giga LAN (Fischer)	WLAN 802.11 a/b/g/n/ac
1× Serial port (DB9)	1× MIL DC in 12–32 V	1× VGA (Fischer)	Bluetooth 4.2 (BLE)
1× USB 3.1 (USB-IF BC V1.2 for		1–2× Serial I/O RS232/RS422 (Fischer)	Capacitive touch panel display
1.5 A fast charger)		1× Audio (Fischer)	−30°C/-22°F Operating Temperature
		1× USB 2.0 (Fischer)	

MilDef RW11

Specifications:
CPU: Intel® Quad Core™ i7-3610QE Processor
Display: 15.6" (1920×1080), TFT AG Glass, Optical bonding, Sunlight readable
Display brightness: 300 nits
Memory: RAM Max 32 GB, DDR3 1600 MHz
Operating System: Windows 7/8.1/10 and Server 2012
Graphics: Intel HD Graphics 4000
Storage: Up to 4x SATA II/III SSD (removable)
Input devices: Multi-touch Capacitive touch pad
Audio: HD Audio and Stereo Speakers, embedded mic
Temperature: −20°C to +60°C (-4°F to +140°F)
Temperature storage: −40°C to +70°C (-40°F to +158°F)
Dimensions (W × D × H): 392 × 302 × 42 mm (15.43 × 11.89 × 1.65 in) w/ bumpers
Weight: 4.86 kg (depending on configuration)
Compliant to: CE, FCC, WEEE, REACH, WHQL, IP65 (without protection caps),
MIL-STD-810G and MIL-STD-461F, RoHS

Ports and connectors:	1× VGA	COM3/4 RS232/422/485	Optical drive by Custom Design
2× SSD Bay (SATA II)	2× RS232/422/485	1× Mini HDMI	Project (trade-off with 3rd, 4th SSD
2× SSD Bay (SATA III)	1× MIL DC in 12–32 V	1× Mini-Flex bay (trade-off with	+ 2nd Battery)
2× USB 2.0		3rd~4th SSD)	Smart Card reader by Custom Design
1× RJ45 GigaLAN	**Options and accessories:**	1× POGO dock port	Project
1× USB 3.0 (1.5 A fast charger)	ViaSat Eclypt Self encrypting SSD	Touch screen (capacitive)	Handle on front
1× USB 3.0	1× 2nd LAN RJ45 (GigaLAN)	800 nits high brightness display	Backpack
3× 3.5mm	GPS	−30°C Operating Temperature	MIL-STD-461F – Ground Navy
(Mic, Line-in/earphone)	WLAN 802.11 ac/a/b/g/n	NVIDIA GeForce® GTX950M 2 GB	MIL-STD-461F – Ground Army
1× Display port	Bluetooth v4.0 (BLE)	discrete add-on card*	

*2nd replaceable cooling fan for discrete graphics add-on card

MilDef RK12

Specifications:
CPU: Intel® Core™ i7–6822EQ (8M Cache, up to 2.80 GHz)
Display: 15" XGA 1400 × 1050 LED backlit
Display brightness: 470 nits
Memory: Up to 32 GB DDR4 2133 MHz
Storage: Removable 2.5" SATA III HDD / SSD
Operating System: Windows 7/10
Graphics: Intel® HD Graphics 530
Battery: 10.8V Li–ion (8700mAh)
Input devices: 83–key backlit keyboard, resistive touchpad
Audio: HD Audio and Stereo Speakers
Temperatures: −20°C to +55°C (−4°F to +131°F)
Temperature storage: −40°C to +70°C (−40°F to +158°F)
Dimensions (W × D × H): 351.6 × 294.2 × 78.7 mm (13.84 × 11.58 × 3.10 in) w/ bumpers
Weight: 5.5 kg (12.13 lb)
Compliant to: CE, FCC, WHQL, WEEE, REACH, IP65, MIL–STD–810G and MIL–STD–461G

Ports and connectors:		**Options and accessories:**	
1×Flex Bay	1×Express card (PCIe)	2×Serial port DB9	SATA and serial signals for customer
(2nd HDD/DVD/Battery)	2×Serial port DB9	1×PCMCIA II	specific modules
1×PS/2	(COM1 & COM2)	ViaSat Eclypt Self encrypting SSD	WLAN 802.11 a/b/g/n/ac
2×USB 3.0	1×Display Port	GPS	Bluetooth 4.2
1×USB 2.0	1×DVI	Removable 3.5" DVD–RW 2nd SATA	TPM2.0
(USB fast charge)	1×VGA	High brightness display 1000 nits	2nd battery 10.8V Li–ion (8700mAh)
3×3.5 mm	1×MIL DC in 12–32 V	Resistive single touch screen	Multi battery charger
(Mic, Line–in/earphone)	1×Docking connector	HDD with heater or secondary	−30°C/−22°F Operating Temperature
1×RJ45 Giga LAN		battery.	Surge protector/BVA module
		Flex bay with DC, PCIe, USB, LAN,	

Accessories

Here you'll find a selection of accessories to compliment your MilDef computer. Please contact your local MilDef office to discuss your needs and requirements.

Flex Bay

Available for all MilDef 10/12-series notebooks (RT, RK and RF)

Specifications:
2×Gbit LAN
2×COM-ports
1×Full RS232/RS485
1×Tx / Rx
USB
PCIe
SATA
Power in/out
2nd HDD/SSD: SATA & Heater
2nd Batery: 7200 mAh Lithium Ion
DVD±RW: 3.5" CD/DVD SATA

Wireless
Fiber-Optic
COFDM
Multi-Channel

IP54 Keyboard

Specifications:
89 key layout (emulates 101 /102 keys)
Windows keys, Elastomer keys (backlight)
Operating force: 60 +/–20 g
Full travel: 2 mm
Life: > 1 million times
Weight: 1.2 kg (2.6 lb), 1.7 kg (3.7 lb) with rubber plate (option)
Size of the key caps part: 275×100 mm (10.8×3.9 in)
Size of the keyboard:
325×172 mm (12.8×6.7 in) (W×D)
Designed to meet: IP54,
MIL-STD–461D (option)
Temp operating: –20 to +50°C (–4°F to +122°F)
Temp storage: –30 to +70°C (–22°F to +158°F)

DB7 Mini KBD

Specifications:
USB, 66 keys, backlight, right/left click, stickpointer, Magnesium
Designed to meet: IP54
Certifications: CE/FCC
Temp operating: –20 to +50°C (–4°F to +122°F)
Temp storage: –40 to +70°C (–40°F to +158°F)
Dimensions: 190×90×12 mm (7.5×3.5 ×0.5 in) (W×D×H)
Weight: 170 g (0.4 lb)

KBD301 Keyboard

Specifications:
Backlit Keyboard with 87 key layout + numpad, integrated trackpad (including buttons).
CNC milled Aluminum
Weight: 0.8 kg (1.7 lb)
Designed to meet: IP54, MIL-STD–810G, MIL-STD–461F
Temp operating: –40 to +71°C (–40°F to +160°F)
Temp storage: –40 to +71°C (–40°F to +160°F)

DR Keyboard KBD211

Specifications:
66 key B/L, Elastormer keys (backlight), USB
Designed to meet: IP54, MIL-STD–810G
Temp operating: –30 to +55°C (–22°F to +131°F)
Temp storage: –40 to +70°C (–40°F to +158°F)
Dimensions: 235 × 200 × 15.5 mm (9.3×7.9 ×6.1 in) (W × D × H)
Weight: <0.7 kg (<1.5 lb)

DockLite Standard
(option for DK, DR and DT)

Connections:
1 × RJ45 GigaLAN
2 × USB 2.0
2 × Sealed MIL USB 2.0
1 × VGA (DB15)
2 × RS232(DB9)
1 × MIL DC in with surge protection
1 × Audio Out
1 × Mic

DockLite Fiber
(option for DK, DR and DT)

Connections:
1 × 100 Mbit 1310 nm MultiMode LC
2 × USB 2.0
2 × Sealed MIL USB 2.0
1 × VGA (DB15)
2 × RS232 (DB9)
1 × MIL DC In with surge protection
1 × Audio Out
1 × Mic

DockLite DS
(option for MilDef DS Series)

Connections:
1 × VGA (DB15)
1 × MLAN
2 × USB 2.0
1 × RS232(DB9)
1 × MIL DC in with surge protection

BMS Docking station

Specifications:
Docking station for DR/DT Series
Signals:
1 × COM2 (RS232)
1 × COM3 (RS232)
1 × VGA
1 × Video
1 × GPS–Antenna (optional)
1 × USB
1 × COM4 = USB > RS232
1 × GPS (Military or Industrial)
1 × LAN/FiberLAN
5 V out
Designed to meet: IP54, MIL-STD-810F, MIL-STD-461E
and MIL-STD-1275 1 × DC
Dimensions: 250 × 80 × 216 mm (9.8 × 3.1 × 8.5 in)

19"/6 MC701
Media converter

Specifications:
Converts between Ethernet copper
and fiber (Minic Tyco connector)
Also available with LC connector
Temp operating: −40 to +55 °C (−40°F to +131°F)
Temp storage: −40 to +70 °C (−40°F to +158°F)
Dimensions: 73 × 140 × 44 mm (2.9 × 5.5 × 1.7 in) (W × H × D)
Ports: 1 × LAN RJ45 (1000 Mbps)
1 × LAN Fiber MiniTyco, Single Mode (1000 Mbps, 1310 nm)
1 × DC In 5 V (Binder)
1 × DC In 10–32 V DC (ITS)

Coppar LAN can be configured to 10/100/1000 Mbps.
Variants with Mulitmode fiber is available.

19"/6 MC702
Media converter

Specifications:
Converts between Ethernet copper
and fiber (LC connector)
Temp operating: −40 to +55 °C (−40°F to +131°F)
Temp storage: 40 to +70 °C (−40°F to +158°F)
Dimensions: 1 × LAN RJ45 (1000 Mbps)
1 × LAN Fiber LC, Single Mode (1000 Mbps, 1310 nm)
1 × DC In 5 V (Binder)
1 × DC In 10–32 V DC (ITS)

Coppar LAN can be configured to 10/100/1000 Mbps.
Variants with Mulitmode fiber is available.

Adjustable stand DR/DT

Specifications:
Stand for our MilDef DR/DT Series
Adjustable in all directions.
The joint consists of a rubber ball,
which acts as a vibration damper.
Dimensions: 244 × 312 × 165 mm
(9.6 × 12.3 × 6.5 in) (W × H × D)
Weight: 2.3 kg (5 lb)

Adjustable stand DS Series

Specifications:
Stand for our MilDef DS Series
Adjustable in all directions.
The joint consists of a rubber ball,
which acts as a vibration damper.
Dimensions: 244 × 312 × 165 mm
(9.6 × 12.3 × 6.5 in) (W × H × D)
Weight: 2.2 kg (4.8 lb)

19"/2® Product range

Save up to 75% of space or add more functionality

Our innovative approach to product design can be seen with our new modular 19"/2® units. Being only 50% of the size of the existing 19" form factor, they create up to 75% more space in racks. This makes it possible to mount more units and hence add functionality. Smaller units are particularly valuable for use in cramped spaces, such as found in ground vehicles and aircraft.

This is a perfect example of where we are truly reshaping your communication power.

Endless configuration possibilities

The ability to readily combine communication units of the 19" form factor with units of MilDef's 19"/2® form factor gives the practical benefits of integrated solutions and endless configuration possibilities to quickly build the communication system you want.

More important benefits

The smaller size of our 19"/2® modules provides you with the additional important benefits of:
• Less weight
• Less energy consumption
• Less heat generation

Sustainable form factor

A key consideration taken into account when designing our 19"/2® form factor was to make it sustainable. This satisfies the demand of defence equipment purchasers for the long-term stable supply of particular types of equipment. Such sustainability also matches the long lifecycles of most military vehicles and aircraft, and the need to continually update systems.

Moreover, we assure you of lifetime support for all MilDef equipment.

Typical application segments

The various communication units of the MilDef 19"/2® product series are typically used within the following military segments:
• Ground vehicles
• Deployed forces
• Special forces
• Air force
• Navy

Customized units or special electronics

Our 19"/2® communication units are supplied as military off-the-shelf (MOTS) products, but MilDef can complement these with our hardware according to customer specifications. In addition, if there are no MOTS products that suit your needs, we can design special electronic units based on your particular specifications.

19" rack installation

Two or more modules can be stacked on top of each other

Two modules can be mounted together in a 19" rack

Stand–alone installation

The possibilities are endless

12

Computers and storage

19"/2® CS1100 series

A rugged server based on the Intel® Xeon® platform (8 or 16 core). Up to 128 GB RAM, a hardware RAID and with removable disks.
MIL Standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +55°C (-40°F to +131°F)
Temp storage: −40 to +71°C (-40°F to +160°F)
Dimensions: 220 × 400 × 88 mm (8.7×15.7 ×3.5 in)
Weight: 8 kg (17.6 lb)

Interfaces (front):
1× KPT
1× DC in 16–32 V
1× Dual USB
2× USB-A 3.0
2× HMC
1× ETH (1000BASE-SX, OM2)
1× 38999
1× VGA
1× Audio In / out
2× USB 2.0
1× RS232
3× SSD Caddy
1× 2.5" SATAIII

Interfaces (back):
1× Binder
1× Service port (serial)
1× 38999
3× USB 2.0
1× Remote Power on
2× RS232

CS1100 series are available in different configurations, either with MIL connectors or rugged industrial connector. Configuration above is based on the CS1101.

19"/2® CS2100 series

A rugged computer based on the Intel® Xeon® E3-1505L V5 CPU, supporting up to 32GB RAM and M.2 SSD for storage.
MIL Standards: MIL-STD-810F, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +71°C (-40°F to +160°F)
Temp storage: −40 to +71°C (-40°F to +160°F)
Dimensions: 220 × 341 × 65 mm (8.7×13.4 ×2.6 in)
Weight: 3.5 kg (7.7 lb)

Interfaces (front):
1× 38999
1× DC in 12-32V DC
1× 38999
3× USB2.0
3× RS232
1× 38999
4× ETH (1000BASE-T)
1× 38999
1× VGA
1× Remote Power On
1× AUDIO in/out

1× ODU
1× DVI
2× ODU
1× USB3
Interfaces (back):
1× Binder
1× Service port (serial)

CS2100 series are available in different configurations, either with MIL connectors or rugged industrial connector. Configuration above is based on the CS2101.

19"/2® CS300 series

A rugged server based on the Intel® Xeon® platform, up to 32GB RAM and a hardware RAID with removable disk (optional).
MIL standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP54
Temp operating: −40 to +55°C (-40°F to +131°F)
Temp storage: −40 to +71°C (-40°F to +160°F)
Dimensions: 220 × 332 × 88 mm (8.7×13 ×3.5 in)
Weight: 5.4 kg (11.9 lb) without disk

Interfaces (front):
1× ITS
1× DC in 10–32 V
1× 38999
1× VGA
1× RS232
1× Audio in/ out
2× USB 2.0
1× 38999
4× ETH (1000BASE-T)
3× SSD Caddy
1× 2.5" SATAII

1× 38999
1× DVI
3× USB 2.0
2× RS232 (COM3/COM4)*
1× Remote power on
Interfaces (back):
1× Binder
1× Service port (serial)

CS300 series are available in different configurations, either with MIL connectors or rugged industrial connector. Configuration above is based on the CS371. *Rx/Tx/RTS only

19"/2® CS9100 series

A rugged computer based on the Intel® Core™ i7– 6822EQ CPU, supporting up to 32 GB RAM and a built in M.2 SSD.
MIL standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +55°C (-40°F to +131°F)
Temp storage: −40 to +71°C (-40°F to +160°F)
Dimensions: 220 × 360 × 44 mm (8.7×14.2 ×1.7 in)
Weight: ≤5 kg (≤11 lb)

Interfaces (front):
1× ITS
1× DC in 10–32 V
8× RJ45
1× ETH (1000BASE-T)
2× RJ45
1× ETH w. PoE (1000BASE-T)
1× Dual USB
2× USB-A 3.0

Interfaces (back):
1× Binder
1× Service port (serial)
1× Dual USB
2× USB-A 2.0
1× HDMI
1× DSUB HD15
1× VGA

19"/2® ST1100 series

A Storage Computer that can be used either stand alone or as a NAS with iSCSI. Support up to 5 removable 2.5" SSDs.
MIL standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +55°C (-40°F to +131°F)
Temp storage: −40 to +71°C (-40°F to +160°F)
Dimensions: 220 × 372 × 88 mm (8.7×14.6 ×3.5 in)
Weight: 8 kg (17.6 lb)

Specification:
CPU: Intel® Xeon® E3-1505L v5
Memory: Up to 32RAM
RAID: 0, 1, 4, 5, 6 & 10

Interfaces (front):
5× 2.5" SSD SATAIII
1× ETH 1000BASE-T (RJ45)
1× ETH 10GBASE-T (RJ45)
1× RS232 Console (RJ45)
1× System Button

Interfaces (back):
1× ETH 1000BASE-LX (LX)
2× USB 3.0 (Dual USB-A)
1× DC in 16-32V DC (ITS)
1× Service (Binder)

Displays, KVM & gateways

19"/2® KSW400 series

A seven port KVM switch with possibility to daisy chain up to 3 units.
MIL standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP54
Temp operating: −40 to +55°C (−40°F to +131°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 183 × 44 mm (8.7×7.2 ×1.7 in)
Weight: 2 kg (4.4 lb)

Interfaces (front):
1× ITS
1× DC in 10–32 V
1× DSUB HD15 (output)
1× VGA
1× Dual USB-A (KBD/Mouse)
2× USB 2.0 host
1× Dual USB-A (USB2.0)
2× USB 2.0 host

Interfaces (back):
1× Binder
1× Service port (serial)
7× DSUB HD15 (computer)
1× VGA
1× USB
1× DSUB HD15 (link out)
Link out

KSW400 series are available in different configurations. configuration above is based on the KSW402.

19"/2® KSW1100 series

KVM switch for DVI and USB input, allows up to 6 computers to share the use of a one console with DVI and USB (kbd/mouse). Input can be done either using pushbuttons on the switch or by an external switch. **MIL Standards:** MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +71°C (−40°F to +160°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 222 × 44 mm & 88 mm (8.7×8.7 ×3.5 in)
Weight: 2 or 4 kg (4.4 or 8.8 lb)

Interfaces (front):
1× Remote (38999)
2× USB 2.0 Console (USB A)
1× DVI Console (DVI-D)
1× Service (Binder)
1× Power (ITS)

Interfaces (back):
4× or 6× DVI Computer
6× USB 2.0, Computer 1 to 6

19"/2® SSW1100 series

A USB Network Hub to is built to share up to 5 USB devices over the LAN.
MIL Standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +60°C (−40°F to +140°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 261 × 44 mm (8.7×10.3 ×1.7 in)
Weight: 2,4 kg (5.3 lb)

Interfaces (front):
5× 38999 (USB source)
1× USB 2.0
1× HMC (LAN)
1× ETH (100Base-FX)
1× 38999
1× DC in 10–32V
1× Binder
1× MilDef Service port

19"/2® SSW2100 series

The USB switch shall allow any combination of USB inputs to be connected to any combination of USB outputs at any given time (e.g. USB Input X1/X2 and X3/X4 are routed simultaneously to USB Output X7 through X10).
MIL Standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +55°C (−40°F to +131°F)
Temp operating: −40 to +55°C (−40°F to +131°F)
Dimensions: 220 × 199 × 44 mm (8.7×7.8 ×1.7 in)
Weight: 1,8 kg (4 lb)

Interfaces (front):
4× USB 2.0 input (38999)
1× Remote control RS422 (38999)
1× DC in 10–32V (38999)

Interfaces (back):
4× USB2.0 output (38999)
1× Service (Binder)

19"/2® SSW200 series

Share serial devices in an IP-network. Individual IP addressing to each serial port. Software switchable between RS232, RS422 and RS485.
MIL Standards: MIL-STD-810F, MIL-STD-461F, & IP54
Temp operating: −40 to +55°C (−40°F to +131°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 182 × 44 mm (8.7×7.2 ×1.7 in)
Weight: 2 kg (4.4 lb)

Interfaces (front):
6× ITS
1× DC out
1× PT02
1× Serial port
1× 38999
1× ETH (100Base-TX)

SSW200 series are available in different configurations, either with MIL connectors or rugged industrial connector. Configuration above is based on the SSW211.

19"/2® DS1100 series

Compact display with built in two port KVM.
MIL standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP54
Temp operating: −20 to +55°C (−4°F to +131°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 400 × 44 mm (8.7×15.7 ×1.7 in)
Weight: ≤5 kg (≤11 lb)

Interfaces display (left side):
2× Brightness button
1× Computer toggle button
1× System button
Interfaces display (right side):
1× Dual USB-A
2× USB 2.0 host
1× Fisher
Display link cable

Interfaces (back):
1× ITS
1× DC in 10–32 V
2× DSUB HD15 (input)
1× VGA
1× USB 2.0
1× DSUB HD15 (output)
1× Display link cable
1× Binder
1× Service port (serial

Switches & time servers

19"/2® ESW1100 series

A rugged unmanaged gigabit ethernet switch, with option for Power over Ethernet and fiber.
MIL standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +65°C, +71°C optional
(-40°F to +150°F, +160°F optional)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 200 × 44 mm (8.7×7.9 ×1.7 in)

Connectors (front):
1×ITS
1×DC in 10–32 V
8×RJ45
1×ETH (1000BASE-T)
2×LC
1×ETH (1000BASE-LH)

Connectors (back):
1×Binder
1×Service port (serial)

ESW1100 series are available in different configurations, including PoE and fiber options. Configuration above is based on the ESW1123.

19"/2® ESW2100 series

A rugged layer 3 Cisco switch, based on the Cisco 3560CX platform. 1Gbps access ports and 1 or 10 Gbps uplinks (optional)
MIL standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +65°C, +71°C optional
(-40°F to +150°F, +160°F optional)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 400 × 44 mm (8.7×15.7 ×1.7 in)
Weight: 4,2 kg (9.3 lb)

Connectors (front):
1×ITS
1×DC in 12–32 V
6×RJ45
1×ETH (1000BASE-T)
2×Tyco PRO BEAM® mini
1×ETH (1000BASE-LX/LH)

Connectors (back):
1×Binder
1×Service port (serial)
8×RJ45
1×ETH (1000BASE-T)

ESW2100 series are available in different configurations, including PoE and diffrent fiber options. Configuration above is based on the ESW2123.

19"/2® ESW400 series

Managed switch with static routing with 10Gbps uplinks (optional)
MIL Standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +55°C (−40°F to +131°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 290 × 44 mm (8.7×11.4 ×1.7 in)
Weight: 2.4 kg (5.3 lb)

Connectors (front):
5×38999
2×ETH (1000BASE-T)

Connectors (back):
3×38999
2×ETH (1000BASE-T)
1×38999
1×Cisco Console (Serial)
1×ITS
1×DC in 10–32 V
1×Binder
1×Service port (serial)

ESW400 series are available in different configurations, either with MIL connectors or rugged industrial connector. Configuration above is based on the ESW453.

19"/2® ESW9200 series

Rugged Cisco fiber switch, based on the Cisco IE4000 series switch.
MIL Standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −20 to +55°C (−4°F to +131°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 400 × 88 mm (8.7×15.7 ×3.5 in)
Weight: 7 kg (15.4 lb)

Interfaces (front):
4×HMC
2×ETH (1000BASE-SX)
1×LC
1×ETH (1000BASE-SX)
1×RJ45
1×Cisco Console (serial)
1×ITS
1×DC in 10–32 V

Interfaces (back):
1×Binder
1×Service port (serial)

19"/2® SSW500 series

Based on a Meinberg LANTIME module.
MIL Standards: MIL-STD-810G, MIL-STD-461F, & IP54
Temp operating: 0 to +55°C (32°F to +131°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 366 × 44 mm (8.7×14.4 ×1.7 in)
Weight: 3.5 kg (7.7 lb)

Interfaces (front):
1×ITS
1×DC in 10–32 VDC
1×RJ45
ETH (100Base-TX)
1×RJ45
Console (Serial)
1×USB
Console
1×USB
Host USB
1×BNC
1×Antenna
1×BNC
1×PPS out
1×BNC

1×PPS input
1×DB9
NMEA (RS232)

Interfaces (back):
1×Binder
1×Service port (serial)

Router

19"/2® RM200 series

Fully rugged router based on the Cisco 5915 ESR card.
MIL Standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +71°C (-40°F to +160°F)
Temp storage: −40 to +71°C (-40°F to +160°F)
Dimensions: 220 × 202 × 44 mm (8.7×8 ×1.7 in)
Weight: 2.4 kg (5.3 lb)

Connectors (front):
1×38999 (WAN)
2×ETH (100BASE-TX)
1×38999 (LAN)
2×ETH (100BASE-TX)
1×38999 (LAN)
1×ETH (100BASE-TX)
1×KPT
1×DC in 10−32 V
1×38999 (WAN)
1×ETH (100BASE-TX)

Connectors (back):
1×Binder
1×Service port (serial)

RM200 series are available in different configurations,
either with MIL connectors or rugged industrial connector.
Configuration above is based on the RM212.

19"/2® RM1100 series

A firewall based on the Cisco ASA 5506H-X including:
- Next-generation firewall (NGFW)
- Next-generation intrusion prevention system (NGIPS)
- Advanced malware protection (AMP)
- Virtual private network (VPN)
MIL Standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +55°C (-40°F to +131°F)
Temp storage: −40 to +71°C (-40°F to +160°F)
Dimensions: 220 × 360 × 44 mm (8.7×14.2 ×1.7 in)
Weight: 3.1 kg (6.8 lb)

Connectors (front):
1×DC in 10-32V (ITS)
1×ETH MGMT 1000BASE-T (RJ45)
1×ETH 1000BASE-T (RJ45)
1×ETH 1000BASE-SX (HMC)
1×RS232 Service (Binder)

19"/2® RM3100 series

A gigabit router based on the Cisco ISR-1100 series router including:
- Cisco IOS XE Software
- Dynamic Routing (BGP, OSPF, IGMP v3, etc)
- Encapsulation (GRE, 802.1Q, Etc)
- QoS
- Access control
- VPN (IP Sec, etc.) SEC SW needed
- Zone based Firewall SEC SW needed
MIL Standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +55°C (-40°F to +131°F)
Temp storage: −40 to +71°C (-40°F to +160°F)
Dimensions: 220 × 360 × 44 mm (8.7×14.2 ×1.7 in)
Weight: 5 kg (11 lb)

Connectors (front):
1×Power (38999)
4×ETH 1000BASE-T LAN (RJ45)
1×ETH 1000BASE-T WAN (RJ45)
1×USB 2.0 (USB-A)
1×USB Console (USB-B)

19"/2® RM6100 series

Rugged Cisco 4G router with built in switch, based on the Cisco 809
router and the Cisco 2020 switch.
MIL Standards: MIL-STD-810G, MIL-STD-461F, MIL-STD-1275D & IP65
Temp operating: −40 to +55°C (-40°F to +131°F)
Temp storage: −40 to +71°C (-40°F to +160°F)
Dimensions: 220 × 400 × 44 mm (8.7×15.7 ×1.7 in)
Weight: 4,3 kg (9.5 lb)

Interfaces (front):
2×RJ45
2×ETH (100BASE-TX)
1×RJ45
1×ETH (100BASE-T)
1×R45
1×Cisco Console Router (serial)
1×RJ45
1×Cisco Console Switch (serial)
1×N-type
1×MAIN antenna
1×N-type
1×DIV antenna
1×SMA
1×GPS
1×USB
1×Cisco Console
1×SIM card

Interfaces (back):
1×Binder
1×Service port (serial)
1×ITS
1×DC in 12−32 V
2×RJ45
1×ETH (100BASE-TX)
1×USB
1×Cisco Console

19"/2® SRM200 series

The Satellite Router is based on the iDirect iCONNEX e850mp Satellite
Router card
Temp operating: −20 to +50 °C (-4°F to +131°F)
Temp storage: −40 to +71 °C (-40°F to +160°F)
Dimensions: 220 × 360 × 44 mm (8.7×14.2 ×1.7 in)

Interfaces (front):
1×ITS
1×DC in 10-32 VDC
1×N-type
1×Rx
1×N-type
1×Tx
1×N-type
1×Rx Simple
1×N-type
1×GPS
1×Mighty Mouse
1×ETH

Interfaces (back):
1×Mighty Mouse
1×Console Port

Power

19"/2® PWR1100 series

A power distribution unit with AC-input and built in UPS.
MIL Standards: MIL-STD-810G, MIL-STD-461F, & IP65
Temp operating: −40 to +55°C (−40°F to +131°F)
Temp storage: −40 to +70°C (−40°F to +158°F)
Dimensions: 220 × 400 × 88 mm (8.7×15.7 ×3.5 in)
Weight: 9.3 kg (20.5 lb)

Connections on front:
9x ITS
1×DC out. 28 V DC (Normal mode)
1×RJ45
1×Ethernet SNMP
1×Ethernet SNMP port (RJ45)
1×System button
1×Mute button
1×Load button

Connections on back:
1×Power in 110/230 VAC
1×Service port

PWR1100 series are available in different configurations. Configuration above is based on the PWR1121.

19"/2® PWR2100 series

A power distribution unit with AC-input and built in UPS.
MIL Standards: MIL-STD-810G, MIL-STD-461F, & IP65
Temp operating: −40 to +55°C (−40°F to +131°F)
Temp storage: −40 to +70°C (−40°F to +158°F)
Dimensions: 220 × 400 × 44 mm (8.7×15.7 ×1.7 in)
Weight: 5.6 kg (12.3 lb)

Interfaces (front):
4×ITS
1×DC out 28 VDC
1×RJ45
1×Eth SNMP port
1×System button
1×Mute button
1×Load button

Interfaces (back):
1×EU Plug
1×AC in 110/230 VAC
1×Binder
1×Service port (serial)

PWR2100 series are available in different configurations. Configuration above is based on the PWR2121.

19"/2® PWR100 series

A 19"/2® AC/DC converter, provide 28 VDC, with an input of 110 or 230 V AC.
MIL Standards: MIL-STD-810G, MIL-STD-461F, & IP54
Temp operating: −40 to +55°C (−40°F to +131°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 202 × 44 mm (8.7×8 ×1.7 in)
Weight: 3 kg (6.6 lb)

Interfaces (front):
2×ITS
1×DC out 28 VDC

Interfaces (back):
1×EU Plug
1×AC in 110/230 VAC
1×Binder
1×Service port (serial)

PWR100 series are available in different configurations. Configuration above is based on the PWR101.

19"/2® PWR300 series

6 port power distribution unit, with fuse on each output.
MIL Standards: MIL-STD-810G, MIL-STD-461F, & IP54
Temp operating: −40 to +55°C (−40°F to +131°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 182 × 44 mm (8.7×7.2 ×1.7 in)
Weight: 1.5 kg (3.3 lb)

Interfaces (front):
6×ITS
1×DC out
1×ITS
1×DC in 10-32 V DC

PWR300 series are available in different configurations. Configuration above is based on the PWR301.

19"/2® PWR500 series

A power distribution unit with DC-input.
MIL Standards: MIL-STD-810G, MIL-STD-461F, & IP65
Temp operating: −40 to +55°C (−40°F to +131°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 220 × 214 × 133 mm (8.7×8.4 ×5.3 in)
Weight: 6 kg (13.2 lb)

Interfaces (front):
1×38999
1×DC in, 24–32 V, max 60 A
1×38999
1×DC out, 12 V, max 20 A
9×38999
1×DC out. 24–32 V DC
(Pass through), max 25A
1×On/Off toggle switch

Special electronics

MilDef can offer our customers a complete realization of any product idea or concept. Our creative, experienced and well-motivated personnel understand what is required to convert a customer's idea into a finished product – keeping cost, quality and time in full focus.

Below are examples of custom special electronics, all of which were tailored for customers' specific requirements and needs.

19" ESW9110

Switch based on the Cisco 2020 Switch.
MIL Standards: IP65, MIL-STD-810G, MIL-STD-461F & MIL-STD-1275D
Temp operating: −40 to +55°C (−40°F to +131°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 440 × 230 × 44mm (17.3 × 9.1 × 1.7 in)
Weight: 4,6 kg (10.1 lb)

Interfaces front:	Interfaces (back):
10 × LAN Fiber (100 Mbps, 1300 nm)	2 × LAN 38999 (100 Mbps)
1 × VGA (DSUB HD15)	2 × LAN Fiber (100 Mbps, 1300nm) 2 × LAN Fiber (1000 Mbps, 850 nm) 1 × Cisco Console Serial RJ45
	1 × Service port

Batt Pack MSP105

Battery Pack compatible with Harris battery box, 10513-4800-02. The Battery Pack MSP105 will give you several different power out options to power mobile devices, e.g. radios, computers, mobile phones etc.
MIL Standards: MIL-STD-810G, MIL-STD-461F, & IP55
Temp operating: −40 to +55°C (−40°F to +131°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 270 × 75 × 200mm (10.6 × 3 × 7.9 in)
Weight: 1,2 kg (2.6 lb)

Interfaces front:
1 × 12/24V DC out
1 × 19V DC out
1 × Dual USB Power
1 × MilDef system button with status indicator
1 × Service port

Disk Clone Station CSP114

Clone one master disk to up to 8 disks simultaneously. Clone station can be used with both 19"/2 caddies and DR8/DR10 disk caddies.
MIL Standards: MIL-STD-810G
Temp operating: 0 to +40°C (32°F to +104°F)
Temp storage: −40 to +71°C (−40°F to +160°F)
Dimensions: 440 x 400 x 88 mm (17.3 × 15.8 × 3.5 in)
Weight: 8 kg (17.6 lb)

Interfaces front:	Interfaces (back):
1 × LAN Master disk bay	1 × Power input, 110/240 VAC
1 × USB 3.0 (ISO file loading, Single A)	1 × VGA (DSUB HD15)
1 × Display	2 × USB 2.0 (Dual A)
4 × Navigation button	1 × Service port
1 × System button with status indication	
8 × Clone disk bay	

Rugged Displays

Forged in the thick of battle

Every MilDef RD display was inspired by action in the field. Each design was developed in cooperation with armed forces to meet the ongoing communication challenges of their armored vehicles and command posts. The range we have today is the result of 10 years of such in-depth collaboration.

We push display technology forward by finding the critical areas of improvement as revealed by on the ground use. That's why MilDef displays are not only some of the toughest on the market, but adapted to the finer points of military operations like the need for stealth, to save space in tight quarters and to be easily integrated with other equipment.

Today, the RD range is a staple of military operations with thousands in use by armed forces around the world.

Performance where it matters most

You can count on our RD displays even in the harshest conditions. They are combat proven to withstand severe shocks, function in extreme temperatures and to be moisture resistant. We build them according to MIL-STD-810 and MIL-STD-461 and put them through an extensive burn-in program before they leave our facilities to guarantee each unit can take everything that's thrown at it.

Hi-res and multifunctional

Your displays need to keep up with modern computing power. We offer hi-res screens with up to 20 megapixel resolution and options like PIP functionality to run multiple programs simultaneously, infrared touch screens and programmable hotkeys.

Plays well with others

The RD displays are compatible with most equipment thanks to their wide range of input and output options and flexible mounting solutions. They also have a long "form, fit, and function" period so you don't have to worry about upgrading any time soon. And no matter how long your displays are in use, you can count on efficient service as we offer lifetime support.

Endless customization options

We specialize in customizing our displays to your needs. Creating your own unique solution is a quick process with rapid prototyping and a short time to production. These projects usually include customized mounting systems, selecting functionality from our wide range of options and tailoring in- and outputs.

Operational advantages that give you an edge

- Wide storage and operating temperature ranges
- Optional infrared touch screen
- Night vision (NVIS) compatible
- PIP functionality
- Invisible Mode automatically dims backlight in stealth situations
- Wide range of inputs and outputs including DVI, USB, composite, serial port, resistive touchscreen, etc.
- On site service is available in many countries
- All MilDef computers can be remote controlled by RD displays over a distance up to 5m
- Designed, developed, produced and maintained according to ISO 9001 and AQAP standard
- Built according to MIL-STD-810, MIL-STD-461 and Ingress Protection standards

Armored vehicle displays

The RD10 and RD15 resist the punishment of the road with rugged metal housings designed specifically for use in armored vehicles. They are multi-functional with features like NVIS, PIP and Invisible Mode. And custom mounting systems are available for smooth integration with your equipment.

The RD10 enhanced temperature range has been designed according to the GVA standard for use inside armored vehicles. With the enhanced temperature range, operations are possible even within the harshest environmental conditions are possible. The high brightness display and the keyboard with backlight allow easy use in bright and dark surroundings. The connectors can be customized according to your specific requirements.

RD10 series

Specifications:
XGA 1024×768, typ. 500 cd/m² , 400:1 contrast
Invisible Mode, NVIS, PIP, Heater, Speaker, F1–F13 keys
Key backlight, USB hub, Touch screen, Remote ON/OFF
(with DP–DVI), Built In Vehicle adapter 18–32 V

Compliant to: MIL-STD–810F, IP65, MIL-STD–461E
Temp operating: −32 to +55°C (−26°F to +131°F)
Temp storage: −46 to +70 °C (-51°F to +158°F)
Dimensions: 293×62×235 mm (11.5×2.4 ×9.3 in) (W×D×H)
Weight: 3 kg (6.6 lb)

Interfaces on back:
1× Earth stud M8
1× DC–in 18–32 V (MIL)
1× Composite Video In, RS232 (MIL)
1× DP–DVI (DVI, ON/OFF, USB) (MIL)
1× VGA (MIL)
2× USB 1.1 (MIL)
*Interfaces also available with rugged industrial connectors

Options and accessories:
Connecting cables
AC/DC adapter
Stylus pen
Nightvision
Stealthmode

RD15 series

Specifications:
XGA 1024×768, typ. 300 cd/m²
1000:1 contrast, Invisible Mode, NVIS, PIP, Speaker, F1–F8 keys,
Key backlight, USB hub, Mouse stick with Left/Right mouse buttons,
Touch screen, Remote ON/OFF (with DP–DVI or Combo cable), Built In
Vehicle adapter 18–32 V

Compliant to: MIL-STD–810F, IP65 (front), MIL-STD–461E, VG95373,
EN61000-4-2, EN61000-4-3
Temp operating: −31 to +63°C (−24°F to +145°F)
Temp storage: −40 to +85°C (-40°F to +185°F)
Dimensions: 351×63×300 mm (13.8×2.5 ×11.8 in) (W×D×H)
Weight: 4.2 kg (9.3 lb)

Interfaces on back:
1× Earth stud M8
1× DC–in 18–32 V (MIL)
1× Composite Video In, RS232 (MIL)
1× DP–DVI (DVI, ON/OFF, USB) (MIL)
1× VGA (MIL)
2× USB 1.1 (MIL)
*Interfaces also available with rugged industrial connectors

Options and accessories:
Connecting cables
AC/DC adapter
Stylus pen

RD15 HD

Specifications:
HD 1080×1920, typ. 1200cd/m^2
750:1 contrast, Invisible Mode, NVIS, Heater, Speaker, F1-F8 keys, Key backlight, Touch screen, Remote ON/OFF (with DP-DVI), Joystick with Left/Right mouse buttons.

Compliant to: MIL-STD 810G, IP65, MIL-STD 461F/G on request
Temp operating: −32 to +65°C (−26°F to +149°F)
Temp storage: −32 to +80°C (-26°F to +160°F)
Dimensions: 435×66×314 mm (17.1×2.6 ×12.4 in) (W×D×H)
Weight: 6 kg (13.2 lb)

Interfaces on back:
1×3G-SDI
1×VGA (MIL)
1×DP-DVI (DVI, ON/OFF, USB) (MIL)
1×DC-In (MIL)
*Interfaces also available with rugged industrial connectors

Options and accessories:
Connecting cables
Additional SDI or CVBS inputs
Front USB port
Stylus pen

RD19 series

Specifications:
SXGA 1280×1024, typ. 350 cd/m^2
1000:1 contrast, Invisible Mode, USB hub, Heater,
Remote ON/OFF (with DP-DVI)

Compliant to: MIL-STD-810F, IP65 (front),
MIL-STD-461F, VG96916 T5, CE
Built In Vehicle adapter 18–32 V
Temp operating: −20 to +55°C (−4°F to +131°F)
Temp storage: −40 to +60°C (-40°F to +140°F)
Dimensions: 480×77.5×405 mm (18.9×3 ×15.9 in) (W×D×H)
Weight: 10.7 kg (23.6 lb)

Interfaces on back:
1×Earth stud M8
1×DC-in 18–32 V (MIL)
1×DP-DVI (DVI, ON/OFF, USB) (DVI-D)
1×VGA (DSUB)
1×Invisible Mode (MIL)
2×USB 2.0 (MIL)
1×Circuit Breaker
*Interfaces also available with rugged industrial connectors

Options and accessories:
Connecting cables
AC/DC adapter
Stylus pen
Touch screen
EMI glass and qualification

Command center displays

Optimize control of your command center communications with the hi-res RD19 and RD40. They are fully ruggedized with an IP65 rating and can be equipped with a heater for operations down to −20° C. They also come with options like PIP, touch screen functionality and remote control to give you an operational edge. Available mounting solutions also allow use in tactical vehicles.

RD22 series

Specifications:
FHD 1920×1080,
typ. 850 cd/m²
5000:1 contrast, Invisible Mode
(wire), Heater

Compliant to:
MIL-STD-810G, IP54,
MIL-STD-461F, CE
Built In Vehicle adapter 18–32 V
Temp operating: −20 to +50 °C
(−4°F to +122°F)
Temp storage: −20 to +60 °C
(−4°F to +140°F)
Dimensions: 580×80×375 mm
(22.8×3.1 ×14.8 in) (W×D×H)
Weight: 13 kg (28.6 lb)

Interfaces on back:
1×DC–in 18–32 V (MIL)
1×DP–DVI
(DVI, ON/OFF, USB) (MIL)
1×VGA (MIL)
1×Invisible Mode (MIL)
2×USB 2.0 (MIL)
*Interfaces also available with
rugged industrial connectors

Options and accessories:
Connecting cables
AC/DC adapter
Stylus pen
Nightvision

RD24 series

Specifications:
FHD 1920×1080,
typ. 300 cd/m2
5000:1 contrast,

Designed to meet:
MIL-STD-810G, IP65,
MIL-STD-461F, CE EN55022
and EN55024
Built In Vehicle adapter 18–32 V
Temp operating: −20 to +70 °C
(−4°F to +158°F)
Temp storage: −30 to +80 °C
(−22°F to +176°F)
Dimensions: 614×76×370 mm
(24.2×3 ×14.6 in) (W×D×H)
Weight: 20 kg (44 lb)

Interfaces on back:
1×DC–in 18–32 V (MIL)
1×DP–DVI
(DVI, ON/OFF, USB) (MIL)
1×VGA (MIL)
2×USB 2.0 (MIL)
*Interfaces also available with
rugged industrial connectors

Options and accessories:
Connecting cables
AC/DC adapter
Stylus pen
−30 °C (−22°F) Operating
Temperature with heater

RD40 series

Specifications:
HD1080 1920×1080,
typ. 700 cd/m²
1000:1 contrast, Invisible Mode,
USB hub, Heater,
Remote ON/OFF (with DP-DVI),
Built In Vehicle adapter 18–32 V

Designed to meet: MIL-STD-810G, IP54, MIL-STD-461E, VG96916 T5, CE
Temp operating: −20° to +40 °C
(−4°F to +104°F)
Temp storage: −20 to +60 °C
(−4°F to +140°F)
Dimensions: 1009×120×617 mm
(39.7×4.7 ×24.3 in) (W×D×H)
Weight: 40 kg (88.2 lb)

Interfaces on back:
1×Earth stud M8
1×DC–in 18–32 V (MIL)
1×DP–DVI
(DVI, ON/OFF, USB) (MIL)
1×VGA (MIL)
1×Invisible Mode (MIL)
2×USB 2.0 (MIL)
1×Circuit Breaker
*Interfaces also available with
rugged industrial connectors

Options and accessories:
Connecting cables
AC/DC adapter
Stylus pen
Touch screen
PIP
Pedestal

Full rugged monitoring system

The high-resolution electronic large-screen (HEL) display is the ideal solution for conveying mission critical data in a command post or situation room. It gives you up to 8K resolution (4k per display) and powerful split graphics computing so you can connect multiple sources for real time viewing.

Highly mobile with demountable parts, the HEL 4.0 display is tough enough to withstand harsh environments where dust, humidity and vibrations are ever present.

The HEL 4.0 is available in both 1×1, 2×1 and 2×2 versions. During ISAF mission some HELs were in duty 24/7 for mission planing and situation report.

HEL 4.0

Specifications:
UHD 4k, 3840 x 2160 per display.
Typ. 450 cd/m² , 4000:1 contrast.
Intel® Xeon® processor D-1541, 32 GB DDR4 RAM.
2×SATA III SSD RAID 0/1 supported.
Support for Windows 10 64 Bit.
6×USB2.0, 2×Gigabit LAN LWL,
4×HEL fibre display interface

Compliant to: MIL-STD-810F, IP54, EN61000-3-3
Temp operating: –19 to +49°C (-2°F to +120°F)
Temp storage: –21 to +71°C (-6°F to +160°F)
Dimensions: 1453×93,4×834 mm (57.2×3.7 ×32.8 in)
(W×D×H) per display
Weight: ca. 59 kg (130 lb) per display

From concept to creation
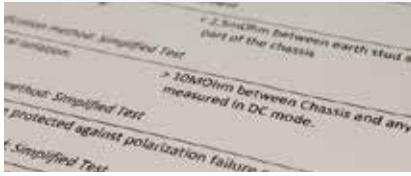
Specification

Upon receipt of a customer order a development specification is produced. This specification will ensure that both MilDef and the customer have a common understanding of the required deliverables.

The agreed specification is also the key document on commencement of a detailed design. The development specification is the backbone of the project and will be referred to and reviewed throughout the R&D process.

Design

After the development specification has been approved by the customer, the detailed design work may commence for the mechanical, electronic and software elements. All drawings, layouts, and specifications needed to produce the prototype are prepared

in-house with the support of the latest available systems, such as 3D CAD and PCB layout. Potential design solutions are continuously evaluated with a practice of "Upstream Design" ensuring that MilDef prototypes are in accordance with customer expectations.

Suppliers

MilDef works with both local subcontractors and global vendors. Key suppliers include CNC (Computer Numerical Control) service suppliers, who machine chassis from single billets of aluminium,

SMA (Surface Mounted Assembly) suppliers, conducting the assembly of PCBs and selected vendors, supplying inter-connectivity solutions especially developed for the defence industry.

Prototype builds

Once suppliers have delivered the parts to MilDef requirements, these are processed through the R&D lab and prototypes are built. The prototypes are always assembled in co-operation

between the R&D engineers and production personnel. This ensures that a volume production perspective is gleaned from an early phase.

Prototype Verification and Validation

MilDef has its own test standard called the MilDef Verification Handbook, which details the minimal tests that are carried out on all prototypes. After prototype assembly, verification

and validation consist of functional, environmental and EMC tests, allied with inspection activities (more extensive testing can be provided on request).

Test Certificate

All tests and inspection activities that are conducted when verifying and validating prototypes are referenced from the requirements laid down in the development specifications.

After verification and validation, a report will be issued proving compliance with the development specification and customer expectations.

Finished Product

For short production runs or custom solutions, MilDef delivers the customer requirement after the prototype has been successfully verified and validated.

For volume products to be built by MilDef the development will continue until the item is verified for serial production.

Designing the solutions of the future

Not every challenge has an off-the-shelf solution. Many of the innovations forces around the world rely on today started out as customization initiatives. Whether it's a few tailored products or hundreds of units, MilDef can help convert a concept for a better solution into reality with speed and efficiency.

Such projects generally involve modifying computers and connectors, designing a space-saving setup and enhancing units with a huge range of accessories. MilDef is also capable of integrating data security solutions and tempest requirements. Every new unit is tested in an EMI chamber to ensure it meets all the required standards.

Innovation at work

Thousands of MilDef solutions are in operation around the world. The German Army is using 2,500 customized MilDef units in their FüInfoSys Heer battle management system. Airbus in France have equipped all of their A400 military transporters with portable maintenance access terminals (PMATs) built from MilDef III and RK886s. And MilDef recently helped the Norwegian Armed Forces create a compact and mobile communi-cation solution using 19"/2 units for their CV90's.

To help the Norwegian Armed Forces take control of the sprawling equipment in their CV90's, we created a compact solution based on 19"/2 units. The solution houses all critical tech like computers, switches, UPS, etc. in one mobile unit.

Custom built solutions
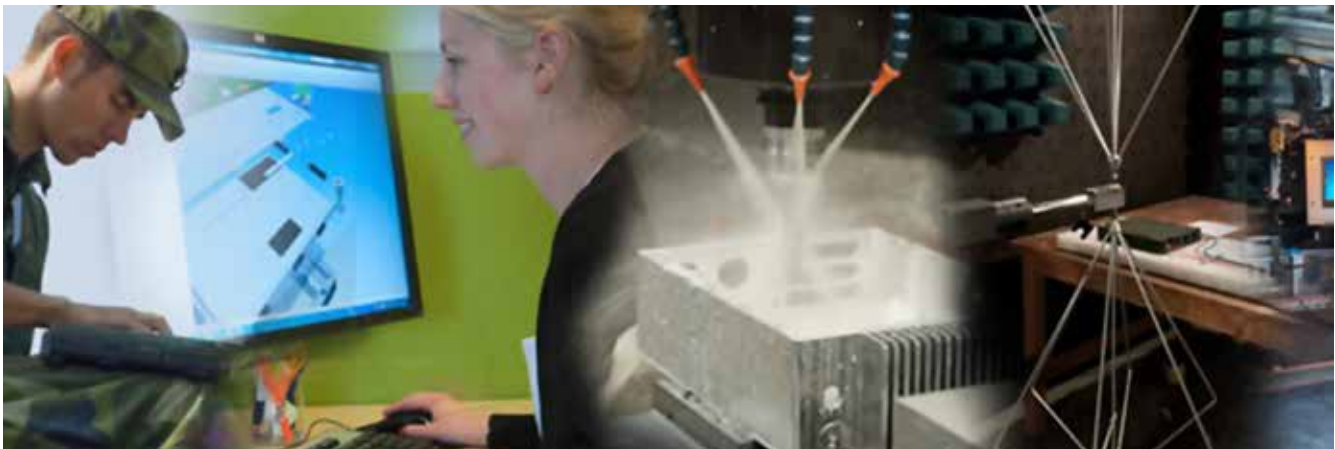
MilDef Design House

MilDef offers its customers complete realisation of their product ideas or concepts. This is achieved by experienced and well-motivated personnel, who have a clear understanding of what is required to convert a customer's idea into a finished product. MilDef focuses on cost, quality and time for both high and low volume products and solutions.

Efficient beyond line-of-sight (BLOS) blue force tracking

As military, police and government forces find themselves conducting operations across greater distances and with more autonomy from their higher commands, reliable and efficient blue force tracking is becoming a critical requirement for effective operations. By implementing the SCC TITAN system, commanders gain access to a complete and seamless operational picture, which allows them to quickly and precisely manage unfolding events. SCC TITAN provides a solution to lost or no communications at the tactical level.

SCC TITAN does not replace Battlefield Management Systems (BMS/C4i platforms) which are, in the main, radio based. It is a Beyond Line of Sight (BLOS) bolt-on that augments existing national systems and cost-effectively resolves the potential deficiency of lost or no communications at the tactical level in every military communications infrastructure and therefore guarantees Situational Awareness and Command and Control.

The SCC TITAN solution provides 3-way messaging functionality and consists of four components: the SCC Platform, SCC Tactical software, SCC Mobile hardware and MilDef rugged computers and special electronics. These components can operate independently, but when combined they provide an interoperable, affordable, beyond line-of-sight blue force tracking (BFT) solution with powerful configuration options.

All communications use a secure virtual private network and unique AES256 encryption into a standalone server solution. Satellite data is sent via a secure network offering no-weak-link, point-to-point encryption. By enabling the transmission and receipt of important information, simple but structured military reports, geospatial display of deployed assets at the tactical level, SCC TITAN ensures that Situational Awareness (SA) and Command and Control (C2) are maintained when tactical voice radio is unavailable. This ensures that commanders have the information they need to act intelligently whatever the voice communications situation.

SCC Platform

The SCC Platform is a secure server solution that enables full BFT for military, police and government organizations. It includes situational awareness, operational command and control, emergency response and the ability to provide comprehensive post operation debriefing. Providing a single, shared tactical Common Operational Picture (COP) for up to 10,000 separate assets on land, in air and at sea, it allows commanders to conduct synchronized planning, control movement and rapidly respond to changing conditions.

By giving access to near real-time situational data it facilitates making faster and better decisions. Secure web protocols, password encryption and satellite communication links using the highest commercial point-to-point encryption ensure complete data security.

SCC Tactical

SCC Tactical is the mobile situational awareness component of the SCC TITAN solution. It is designed to be accessed on a tablet or laptop computer and is used in conjunction with the SCC Platform as a client-based standalone BFT solution. Using secure satellite communications, it allows tactical commanders to pass information to asset groups and/or HQ to ensure continuous secure operation, anywhere in the world.

SCC Tactical is designed to connect and operate directly with Wave and Echo – the primary personnel satellite tracking and command and control devices. Combining them with the SCC Tactical application allows field personnel total, beyond line-of-sight BFT and situational command and control, enabling tactical awareness, advanced communications capability and ultimate mission success.

SCC Mobile

SCC Mobile hardware is designed for asset tracking and basic C2 in the field. It includes portable communications and tracking devices that can be handheld or installed into vehicles, aircraft or ships.

The primary SCC Mobile device is the Wave, which can be used in conjunction with personnel and vehicles. When combined with the SCC Platform and SCC Tactical, it enables commanders to view their position in near real time, and pass this data into the COP. Our Echo device is the ideal dismounted device for soldiers and police forces, with basic functionality. Both Whisper and Echo are designed to be robust, rugged and waterproof. The SCC Pocket app allows for information such as positional data, messages and emergency alerts to be presented in real time on the SCC Platform. It enables commanders to quickly identify the exact location of personnel in case of an emergency and initiate effective response. The application can sit in a passive mode while staff are in lower risk areas so as not to use power or data but can be pinged for instant location in an emergency. The application is fully encrypted, allowing the device to serve as a secure communications channel between team members and back to HQ if necessary.

MilDef logistics system

Our logistics system includes tracking devices that increase your situational awareness by giving logistics the same mapping capability, operational picture and messaging possibilities as manoeuvre forces. Keep track of your cargo no matter how remote the journey with the Shadow and our tracking gateway and sensor.

Tracking solutions for personnel and vehicles anywhere in the world

Wave

Specification:
Operating Frequency (Iridium): 1616 to 1626 MHz
Iridium Modem: 9603
GPS frequency: 1575.42 MHz (L1 carrier)
GPS Receiver: UBlox MAX-M8Q
Battery: 2200 mAh Lithium Ion
Security: AES 256 encryption
Rating: IP67
Operating temp: −20°C to +60°C (−4°F to +140°F)
Operating humidity: < 90% RH
Storage temp: −20°C to 50°C (−4°F to +122°F)
I/O and power interface: USB-C connector (wired for USB 2.0, RS-232, and two GPIO's)
Communication interface: RS232 interface, Bluetooth
Screen: 4" LCD touch screen
Dimensions: 125 mm x 68 mm x 28 mm (4.9 in × 2.7 in × 1.1 in)
Weight: 300 g (0.7 lb)
Software upgrade: Cable upgrade
Mounting: Ram mount with ¼" screw
Part number: T24-0001459-WAV
NATO stock No (NSN): 5895-20-011-3263

Echo

Specifications:
Operating Frequency (Iridium): 1616 to 1626 MHz
Iridium Modem: 9603
GPS frequency: 1575.42 MHz (L1 carrier)
GPS Receiver: Fastrax iT530
Battery: 1800 mAh Lithium-ion
Security: AES 256 encryption
Rating: IP68 Waterproof to 1 meter
Operating temp: −20°C to +55°C (−4°F to +131°F)
Operating humidity: < 95% RH
Storage temp: −20°C to 50°C (−4°F to +122°F)
I/O and power interface: Standard mini
Communication interface: Class two, Bluetooth
Screen: N/A
Dimensions: 108 mm (152 mm at the antenna) x 57 mm x 25 mm
4.3 in (6 in at the antenna) × 2.2 in × 1 in
Weight: 150 g (add 8.5 g for belt clip) 0.3 lb (add 0.02 g for belt clip)
Software upgrade: Cable upgrade
Mounting: X-grip mount
Part number: T24-0001457-ECHO
NATO stock No (NSN): 5895-99-216-4223

Shadow

Specifications:
Operating Frequency (Iridium): 1616 to 1626 MHz
Iridium Modem: 9603
GPS frequency: 1575.42 MHz (L1 carrier)
GPS Receiver: Fastrax iT430
Battery: 6900 mAh Lithium-Lon
Security: AES 256 encryption
Rating: IP67
Operating temp: −20°C to +55°C (−4°F to +131°F)
Operating humidity: < 90% RH
Storage temp: −20°C to 35°C (−4°F to +95°F)
I/O and power interface: 3 Digital I/O 2 Analogue I/O
Communication interface: WiFi, Bluetooth, RS232
Screen: N/A
Dimensions: 30 mm x 320 mm x 105 mm (1.2 in × 12.6 in × 4.1 in)
Weight: 0.71kg (1.6 lb)
Software upgrade: Cable upgrade
Mounting: Magnet mount or bolt
Part number: T24-0001458-SHD
NATO stock No (NSN): 5895-99-324-0340

MilDef Tracking System TGW102

Specifications:
Mesh radio network: Runs on the ISM 2.4 GHz band
Range: 500 m (1640 ft) range between nodes
(free line of sight and 5dBi antenna))
Sensors: 3-axis shock sensor (max 50 g readout), temperature sensor −40 °C
to 85 °C (-40°F to +185°F), humidity sensor (0 % RH to 100 % RH) , positioning
sensor (GPS)
Power consumption: <500 mW (max), <5 mW (typical)
Alarm: Selectable alarm threshold via SAT, GPRS or service interface
Satellite network: Iridium
Interfaces (front): 1 × service port, 1 × system button with status indicator,
1 × battery compartment
Interfaces (left): 1 × door sensor interface (binder), 1 × satellite interface
(compatible with Whisper)
Interfaces (top): 1 × mesh radio antenna (SMA), 1 × GPS antenna (SPA),
1 × GPRS antenna (SMA), 1 × SAT antenna (SMA)
Interfaces (back): 4 rubberized magnetic fasteners
Interfaces (internal): 1 × SIM card compartment
Battery: 3 × 3.6 V / 2000 mA Lithium-Ion battery
Power input: DC 3.6 V (external power optional)
Case: Aluminium alloy
Dimensions: 153 mm × 48 mm × 98 mm (6 in×1.9 in ×3.9 in)
(W × D × H with connectors and magnetic fasteners)
Weight: ≤1300 g (≤2.9 lb)
Security: AES 256 encryption
Certifications: IP64

MilDef Tracking System TST101

Specifications:
Mesh radio network: Runs on the ISM 2.4 GHz band
Range: 500 m (1640 ft) range between nodes
(free line of sight and 5dBi antenna)
Sensors: 3-axis shock sensor (max 50 g readout), temperature sensor −40 °C
to 85 °C (-40°F to +185°F), humidity sensor (0 % RH to 100 % RH) , positioning
sensor (GPS)
Power consumption: <100 mW (max), <1.6 mW (typical)
Alarm: Selectable alarm threshold via SAT, GPRS or service interface
Interfaces (front): 1 × service port, 1 × system button with status indicator, 1 ×
battery compartment
Interfaces (top): 1 × mesh radio antenna (SMA), 1 × GPS antenna (SPA)
Interfaces (back): 2 rubberized magnetic fasteners
Interfaces (internal): 1 × SIM card compartment
Battery: 3.6 V / 2000 mA Lithium-Ion battery
Power input: DC 3.6 V
Case: Aluminum alloy
Dimensions: 81 mm × 48 mm × 98 mm (3.2 in×1.9 in ×3.9 in)
(W × D × H with connectors and magnetic fasteners)
Weight: ≤500 g (≤1.1 lb)
Rating: IP64

Accessories

MilDef can also supply accessories for example:

- External antennas
- Connecting cables, adapters and batteries
- Mounts
- Pouches
- Spares
- Etc.

Please contact your local MilDef office to discuss
your needs and requirements.

Enhancing military communication

MilDef is an international company at the forefront of designing, developing and manufacturing combat-rugged computers and special electronics for communication in extreme environments where reliability, robustness and high performance are crucial.

Our offer includes a battle-field 19"/2® standard military form factor that saves significant space and enables more functionality, customized communication units of this form factor, and special electronics based on your own specifications and dedicated to your particular needs.

We also supply the MilDef Crete range of communication products, including notebooks, tablets and PDAs. Our equipment complies with IP54, IP65, MIL-STD-810 and MIL-STD-461. We are certified according to ISO 9001:2015 regarding design, development and production. Naturally, we provide all the service required for individual units and provide them with lifetime support. Our environmental program is guided by our ISO 14001:2015 certification.

In close cooperation with you, MilDef is dedicated to reshaping your communication power.

mildef