

MilDef RK12



Where brains meet brawn

The MilDef RK12 rugged computer is designed from the inside out to perform in the most extreme conditions over the long haul. With a subtly updated classic form factor and new technology on the inside, a powerful Intel® quad core i7 CPU, and up to 32GB of RAM you will get impressive computing performance with a long lifecycle.

You design the details

The MilDef RK12 can be customized down to the smallest detail to create the smartest solution for your needs. We can even carry out a special development project to help you create a truly unique solution.

Guaranteed performance

Our products always come with lifetime support to ensure your equipment maintains peak performance for many missions to come.

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Technical Specification

CPU	Intel® Skylake i7-6822EQ
RAM	Max 32 GB DDR4
Graphic	Intel HD Graphics 530
Storage	Up to 2TB SSD
Display	15" XGA (1024 x 768), LED Backlight 500 nits, Optical Bonding (1000 NIT optional)
Sound	HD Audio and Stereo Speakers
Keyboard/mouse	83-Backlit Keyboard, Standard keypad PS/2 compatible touchpad (works with water spray and gloves)
Interfaces (right)	1 x Flex Bay 1 x HDD Bay
Interfaces (left)	1 x PS/2 2 x USB 3.0 1 x USB 2.0 1 x USB 2.0 (USB battery charging) 3 x 3.5mm (Mic, Line-in/earphone) 1 x RJ45 GLAN 1 x Express card (PCIe)
Interfaces (rear)	1 x MIL DC in 12-32V 1 x DVI 1 x RGB DB15 1 x DisplayPort 2 x Serial Port DB9 1 x Docking Port (80 pin)
Interfaces (internal)	3 x Mini PCIe 4 x USB 2.0 1 x M.2 2230 4 x Serial (RS232, RS422, RS485/TTL)
Primary Battery	Removable 10.8 V 8700 mAh Lithium-Ion primary battery
Power Input	DC 12 V- 32V Optional Built in Vehicle adapter 12-32 V
Case	Magnesium alloy
Dimensions (W x D x H)	352 x 294 x 79 mm (with bumpers) (13.8 x 11.6 x 3.1 Inches)
Weight	5.5 kg (depending on configuration)
Certifications	CE, FCC, WHQL, WEEE, RoHS2.0, REACH, IP65 (without protection caps), MIL-STD-810G* and MIL-STD-461F*
Operating System	Windows 7, Windows 10 Linux – depending on configuration

*Contact MilDef for full specifications of MIL-STD-810G and MIL-STD-461F

MIL-STD-810G

	Operating	Storage
Altitude Method 500.5, (procedure I, II)	4572 m (15000 ft)	12192 m (40000 ft)
Temperature Method 501.5 & 502.5, (procedure I, II)	-20 °C to 60 °C (-4 °F to 140 °F)	-40 °C to 70 °C (-40 °F to 158 °F)
Temp Shock Method 503.5 (procedure I)	-20 °C to 60 °C (-4 °F to 140 °F)	-
Shock Method 516.6, (procedure I)	40 G, 11 ms 122 cm (26 drops)	40 G, 11 ms 122 cm (26 drops)
Vibration Method 514.6, (category 14 & 20)	OH58A/C Helicopter and Composit wheeled vehicle vibration	-
Vibration Method 514.6, (category 1)	M548 Tracked Vehicle	-
Rain Method 506.5, (procedure II)	276 kPa, 5 Surfaces, 40 min/Surface	-
Humidity Method 507.5	-	Ten 24 h test cycles
Salt Fog Method 509.5, (procedure I)	-	Salt 5 ±1 %, 24 h wet + 24 h dry/cycle. Total 2cycles / 96 h

Options

Flex Bay / Storage	Removable 3.5" CD-ROM, CD/RW, DVD-RW 2 nd SATA HDD with heater or secondary battery. Flexbay with DC, PCIe, USB, LAN, SATA and serial signals for customer specific modules. ViaSat® Eclipt® Core encrypted HDD/SSD [Export Controlled]
Communications	10/100/1000Mbit LAN RJ45, WLAN (a/b/g/n) / BT 4.2 EDR 3.0 HS 4.2(BLE) WWAN HSDPA/UMTS/GSM/GPRS/EDGE GPS
Additional Connectivity	2 x MIL Connector upgrade for RS232/422/485 External COM3/4 RS232/422/485) 100 or 1000 base fibre LAN in LC , HMC or HMA connector. DockUnder-Office (2 x RS232, 2 x USB, 1 x LAN, 1 x PS/2, 1 x DVI, 1 x RGB)
Power	Built in vehicle adapter (12-32V DC) Secondary battery 10.8V 8700 mAh Optional MIL-STD-1275B for DC input
Display	Touch screen (resistive) XGA LED B/L LCD ASSY with 1000 nits
Security	TPM2.0, Secure Boot
Keyboard	89-keys backlit keyboard, Keyboard dust cover (for std keyboard)
MIL-STD-461F	Ground Army (RE102)
Tempest	SDIP-27 Level B

