

Rocky

full rugged

RK12

15.1" notebook



The Rocky Notebooks are characterised by their unique IP65 protection and cooling conception which is only offered by roda. Even uncovered interfaces and at removed drives, there is no risk of damage caused by water or dust. Exclusive components with extended temperature range are used for the Rocky notebooks, the interfaces are decoupled from the mainboard. This enables the Rocky notebooks to be used reliably at extreme ambient temperatures and vibrations.

Technical specification

| | | | |
|---------------------|--|-------------------------------|---|
| Display | LCD 15.1" XGA (1024×768) <ul style="list-style-type: none">• LED backlight• sunlight readable• optical bonding | Interfaces (left side) | 3x Audio (3.5mm), 1x Gigabit LAN (RJ45), 2x USB 2.0 (1x fast charge), 2x USB 3.0, 1x PS/2, 1x Express Card (PCIe) |
| Chipset | Intel® Skylake platform Mobile Intel® QM170 Express Chipset | Interfaces (rear side) | 1x DC-In, 2x serial (DB9), 1x Displayport, 1x VGA (DB15), 1x RD-DVI (*RD = roda Display remote), 1x docking connector |
| CPU | Intel® Core™i7-6822EQ™, 2.0 GHz (2.8 GHz max. Turbo Frequency) | Security | TPM2.0 module |
| Graphics | Intel® HD Graphics 530 | OS | Windows 7 Windows 10 |
| Memory | up to 32 GB DDR4 2133 MHz (2x slots) | Certification | CE, FCC, WHQL, WEEE, REACH, IP65 (with opened I/O-ports), MIL-STD-810G, MIL-STD-461G Ground Navy |
| Storage | exchangeable 2,5" SATA HDD (up to 500 GB) >> optional SATA SSD (up to 1000 GB) | Housing | rugged magnesium housing |
| ODD | exchangeable DVD±RW drive (FlexBay) | Colour | military green (NATO olive / RAL6031HR), black |
| Audio | HD audio, stereo speaker | Dimensions | 352 x 294 x 79.2 mm (L x D x H) |
| Touchpad | resistive | Weight | 5.5 kg |
| Power supply | Li-Ion battery, 10.8 V, 8700 mAh AC-adaptor 90 W, 19 V _{DC} , 3.4 A, 100~240 V _{AC} , 50/60 Hz | | |

| MIL-STD 810G | operating | storage |
|--|--|--|
| Altitude Method 500.6, (Procedure I, II) | 4572 m (15000 ft) | 12192 m (40000 ft) |
| Temperature Method 501.6 & 502.6, (Procedure I, II) | -20°C to +55°C | -40°C to +71°C |
| Temperature shock Method 503.5, (Procedure I-C) | N/A | -40°C to +71°C |
| Rain Method 506.6, (Procedure II) | 276 kPa, 0,5 - 4,5 mm diameter | 276 kPa, 0,5 - 4,5 mm diameter |
| Humidity Method 507.6, (Procedure II) | N/A | ten 24 h test cycles 95 % (30°C - 60°C) |
| Salt fog Method 509.6 | N/A | 5+-1 % salt concentration, 24 h wet + 24 h dry/cycle, Total: two test cycles / 96 h |
| Explosive atmosphere Method 511.5, (Procedure I) | passed | passed |
| Vibration Method 514.7, Category 20 Method 514.7, Category 14 Method 514.7, Category 20 (Procedure I) MIL-STD-810D Method 514.3 Cat. 1 (M548) | Ground Vehicles-ground mobile Rotary wing aircraft-Helicopter All Material min. Integrity Vibration Tracked Vehicle Vibration | Ground Vehicles-ground mobile Rotary wing aircraft-Helicopter All Material min. Integrity Vibration Tracked Vehicle Vibration |
| Shock Method 516.7, (Procedure I) | 40 G, 11ms | 40 G, 11ms |
| Drop Method 516.6, (Procedure IV) | 76 cm (26 drops) operating only with SSD HDD only in storage mode | 76 cm (26 drops) storage |

MIL-STD 461G

| | | |
|--------------|-------------------|--|
| CE101 | 30 Hz ~ 10 KHz | CE101-4 Curve #1 |
| CE102 | 10 KHz ~ 10 MHz | 110 V, Basic Curve +6dB 230 V, Basic Curve +9dB |
| CS101 | 30 Hz ~ 150 KHz | CS101-1 Curve #1 |
| CS114 | 10 KHz ~ 200 KMz | Curve #5-5-5 |
| CS115 | | All |
| CS116 | 10 KHz to 100 KMz | Imax = 10 A |
| CS118 | | All |
| RE101 | 30 Hz ~ 100 KHz | RE101-2, Navy |
| RE102 | 10 KHz ~ 18 GHz | RE102-4, Navy Fixed & Air Force |
| RS101 | 30 Hz ~ 100 KHz | RS101-1, Army |
| RS103 | 2 MHz ~ 40 GHz | 2 MHz ~ 18 GHz, 50 V/m |



Rocky RK12 closed



Rocky RK12 interfaces (rear)

Rocky RK12 rear side
example for MIL interfaces

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Options

- SXGA+ resolution (1400x1050)
- optional LCD brightness up to 1000 cd/m²
- I-Temp MLC, pSLC or SLC SSD (-45°C to + 85°C)
- heater for -30°C operating
- touch screen resistive, sunlight readable
- 4x RS232/422/485 external interfaces
- 2nd LAN card 10/100/1000 MBit
- fiber optic LC or HMC connector (100FX, 1000LX oder 1000SX)
- WLAN card (802.11a/g/n/ac) incl. Bluetooth v2.1, 2.1+EDR, 3.0, 3.0+HS, 4.0(BLE)
- GPS module u-blox Neo-M8N (GPS/GLONASS)
- integrated smart card reader class 1
- internal vehicle adapter (direct 12 V_{DC} - 32 V_{DC}) incl. SP200 module / surge protector
- different keyboard versions available
- isolated housing for vehicle installation
- military grade connectors for nearly all kind of interfaces on request

Optional certifications & modifications

- MIL-STD-461G certification
 - Ground Army (Navy mobile & Army)
- TEMPEST SDIP 27 Level B (ER)

Optional accessories

- AC-adapter with IP65, MIL-STD810G, MIL-STD461G
- second Li-ion battery 10.8 V, 8700 mAh (exchangeable with ODD)
- second HDD/SSD (exchangeable with ODD)
- transportation bag
- rugged transportation case
- DockUnder (different versions available)
- ShockMount
- FlexBay module (exchangeable with ODD)
 - the FlexBay allows nearly endless possibilities for interfaces or enhancements