KAREL SertEL MILITARY HAND-HELD COMPUTER

SertEL IS A NEW GENERATION HAND-HELD COMPUTER WITH RESISTIVE TOUCH SCREEN WHICH IS DEVELOPED IN ACCORDANCE WITH THE HARSH MILITARY FIELD CONDITIONS.

SertEL utilizes N4200 processor and embedded GPS/Glonass global positioning system. A single military connector provides power, USB and Ethernet interfaces. SSD module which carries all internal memory can be replacable by means of the waterproof cover which is placed the backside of the computer. The GPS module installed at the top side of the mechanical structure is isolated from the internal electronics to minimize the interference between electronic circuits and the GPS signals. The common Q7 form-factor single board computer is used in the device, to make possible changing the processor for various requirements and future updates.

Technical Specifications

Processor: Intel N4200, Q7 module
Display and Resolution: 7 ", 1280x768
Brightness and Contrast Ratio: 1500 cd / m2, 1: 600
Touch Screen: Resistive Touch,
12 Bit Linux, 11 Bit Win 10
Operating System: Windows 10
Memory: 2GB DDR-3
Storage: 4GB eMMC Flash with up to 32GB SSD
Operating Temperature Range : -32 ° C / + 60 ° C
Drop Test: 1.2 m multiple drop
Keypad: On/Off and programmable keys
Operating Voltage: 24V DC (18-36V)
Weight: <1.4 kg
Waterproofness: IP65

- SertEL supports ethernet interface up to 10 / 100Mb
- SertEL has 7 inch resistive touch-screen with high resolution
- The screen is readable under sunlight.
- SertEL is supplied from external power supply (24VDC). (Optional battery)

Environmental Conditions	Standard	Remarks
Storage Temperature	MIL-STD-810G	It provides the storage requirement at -40°C low temperature environment in accordance with MIL-STD-810G Method 502.5 Procedure I. It provides the storage requirement at + 60 ° C and RH = 14% humidity in accordance with MIL-STD-810G Method 501.5 Procedure I
Operating Temperature	MIL-STD-810G	It provides the operation requirement at -32°C low temperature environment in accordance with MIL-STD-810G Method 502.5 Procedure II. It provides the operation requirement at +50°C and RH=20% humidity in accordance with MIL-STD-810G Method 501.5 Procedure II
Humidity	MIL-STD-810G	It provides the 95 % non-condensing relative humidity requirement in accordance with the temperature cycle defined in MIL-STD-810G Method 507.5 Procedure II (Aggravated Cycle) Table 507.5-IX, Figure 507.5-7
Vibration	MIL-STD-810G	It can also operate when it switched off in the vibration conditions mentioned in MIL-STD-810G Method 514.6, Procedure I, Category 4, Table 514.6C-II, Fig. 514.6C-1
Shock	MIL-STD-810G	It also meets the requirement when it is switched off for 20g, 11ms saw blades shock described in MIL-STD-810G Method 516.6, Procedure I, Table 516.6-II. It provides 1.2m drop rate requirement in accordance with MIL-STD-810G Method 516.6 Procedure IV Table 516.6-VI
Altitude/Low Pressure	MIL-STD-810G	It meets the requirement at -4.5°C 3000m (Pressure: 70,108 kPa) described in MIL-STD-810G Method 500.5 Procedure II
Sand and Dust	MIL-STD-810G	It meets the requirement of sand and dust described in MIL-STD-810G Method 510.5 Procedure I
Rain	MIL-STD-810G	It meets the requirement of rain described in MIL STD-810G Method 506.5 Procedure III
EMI/EMC	MIL-STD-461F	It is compatible with the requirements of MIL-STD-461F CE102, CS114, CS115, CS116, RE102, RE103

KAREL

Cyberplaza B Blok Kat:3
Bilkent 06800 Ankara / Turkey

T 0 312 265 02 90
F 0 312 265 02 97

defence@karel.com.tr
www.karel-electronics.com