Carlson MC-8

Carlson Machine Control's Newest Control Box

- Full daylight readable screen
- Wide operating temperature range
- IP65 rating
- Highly ruggedized and lightweight
- Convenient 8" profile

Experts in Machine Control Applications since 1996

- Mining
- Landfill
- Piling
- Dredging
- Construction
- Contract Drilling
- Custom Applications

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www.carlsonsw.com or call 800-989-5028

Display

- **Viewable Area** 4:3 aspect ratio. 162 mm (W) x 121.5 mm (H) 8.0-inch (20.32 cm) diagonal.
- **Native Resolution** 800 x 600; dot pitch: 0.0675mm x 0.2025mm.
- **Brightness** 1,400 nits typical. This value only applies to indoor performance, the effective outdoor performance is greater than 1,600 nits. (1 nit = 1 Cd/m2.) The panel PC also supports automatic backlight control using an inbuilt light sensor and is configurable through a PC utility.
- **Viewing Angle** Horizontal: 140° typ, 120° minimum. Vertical: Up: 50° typ and 40° minimum. Down: 70° typ and 60° minimum.
- **Touch** 5-wire resistive on 1.8mm glass. Supplied with surface protection film fitted.

PC

- **Processor** Intel® Atom™ E3845 1.91Ghz. Intel® Atom™ E3825 1.33Ghz.
- **Instruction Set** 64-Bit.
- **Memory** 2GB DDR3L 1333 RAM. Optional 4GB RAM available in some configurations.
- **System Chipset** Intel® Bay Trail E3800 Series.
- **BIOS** AMI Aptio UEFI. Multi Stage Watchdog.
- **Operating System** Windows 10, Windows 8, Windows 7, Windows Vista, Windows XP, Windows 2000, Windows Embedded, XP Embedded. Linux and Android also supported

Mass Storage and Media

- **SSD** 4GB to 512GB.
- **External Device** USB Optical Drive: CD-ROM, DVD, Blu-Ray. USB Floppy Drive, USB Flash Drive.
- **Boot Source** Internal SSD. Internal MicroSD. External USB flash drive. External USB floppy drive. External optical drive.

Video and Audio

- **Video** Intel® Graphics Core with 2D and 3D hardware accelerator. Support for high performance hardware MPEG-2 decoding, WMV9 (VC-1) and H2.264 (AVC) support Blu-ray support @ 40 MB/s, hardware motion compensation.
- **Sound** High Definition Audio Interface with dual integrated stereo speakers.

Wireless Connectivity

- **GPS** Optional 72-Channel UBlox NEO-M8 GPS receiver. Supports: GPS/QZSS L1 C/A, GLONASS L10F, BeiDou B1, SBAS L1 C/A: WAAS, EGNOS, MSAS. External SMA connector, with Active Antenna support for enhanced GPS reception.
- **Bluetooth** Optional Class 2 Bluetooth V2.0 support with suitable WiFi combo card.
- **3G** Optional Quad Band 3G /4G 900/1800/850/1900/2100 module with Micro SIM and external SMA antenna support.
- **Wireless LAN** Optional IEE 802.11 AC/a/b/g/n module with dual external SMA antennas.
- **Other** Other Full Length Mini PCIe compliant wireless cards can be fitted at time of manufacture. Contact Carlson for more information.

Physical Characteristics

- **Mounting** 75mm VESA mount.
- **Dimensions** 220mm x 193mm x 55mm.
- **Weight** Up to 1.5kg
- **Shipping** Up to 1.65kg
- **Environmental** Operating: -40°C to +75°C. Storage: -40°C to +85°C. 10% to 90% RH, non-condensing.
- **Certification** C-tick. Other certifications available upon request.
- **Protection** IP65 front and rear.

Interfaces

- **COM** Three RS-232 ports available with *QuickConnect 2* interface cable. Three full function USB 2.0 ports.
- **USB** One full function USB 2.0 port available with *QuickConnect 4* interface cable. Two full function USB 2.0 TYPE A ports available on the rear and front edge.
- **LAN** One 10/100 Base-T LAN port available with *QuickConnect 4* interface cable.
- **Digital I/O** Two independent digital inputs and two independent digital outputs with *QuickConnect 1* break out cable. Two CAN Bus2.0b with J1939 protocol with *QuickConnect 3* interface cable.
- **CAN / Vehicle / Power** Two 12v DC internally fused outputs to power CAN devices (up to 100mA per device). Other CAN Bus protocols available. Contact Carlson for more information.
- **Video Input** One Composite Video Capture: NTSC, PAL-B, PAL-D, PAL-G, PAL-I, PAL-K through Connector 1 with *QuickConnect 1* cable.
- **Function Keys** Power on/off, backlight brightness up/down, and volume up/down. Function keys can be re assigned in software. Custom labeling of buttons available, minimum order quantities may apply.

Power

- **Power Supply** Input voltage range 8 VDC to 39 VDC.
- **Power Consumption** 33w Max. 20w Nominal.
- **Accessory Control** The panel PC has an accessory input for power on/off control through the *QuickConnect 1* break out cable.
- **UPS** Internal 7.2Wh Uninterruptible Power Supply (UPS) providing up to 30 minutes of run time.
- **Transient Protection** Load dump and other transients specified in ISO-7637.

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