



Hub-Data9II continues its commitment to developing state-of-the-art technology with its 6<sup>th</sup> generation Mobile Computer System, the M6.

The M6's three-piece design makes installation and maintenance a snap. The rugged construction of the M6 holds up to the harsh environment of Public Safety vehicles.

Featuring mobile processors, including the Intel® Core™ 2 Duo, the M6's industry leading design offers future-proof upgrade options backed by a 3 year + 3 month all-inclusive warranty.

The M6 CPU supports all Hub-Data9II M-series and L-series displays, known for being the brightest, thinnest and most rugged touch screens available for vehicular computing.



# Hub-Data9II

## M6 Specifications:

### CPU

|                              |   |
|------------------------------|---|
| Processor                    | Intel® Celeron® M 370 processor<br>1.5 GHz, Intel® 915GM Chipset, 1 MB On-die Second Level Cache,<br>400 MHz Front Side Bus   |
| Processor Options*           | Intel® Pentium® M 760 processor<br>2.0 GHz, Intel® 915GM Chipset, 2 MB On-die Second Level Cache,<br>533 MHz Front Side Bus<br><br>Intel® Core™ 2 Duo T7500 processor<br>2.2 GHz, Intel® 965 Express Chipset, 4 MB On-die Second Level Cache,<br>800 MHz Front Side Bus |
| Video Controller             | Integrated with Intel® Graphics Media Accelerator and dynamic allocation  |
| Internal Memory              | 1 GB DDR2 or 2 GB DDR2 or 4 GB DDR2   |
| Mass Storage Options         | Removable Extreme Environment Hard Drive:<br>40 GB, 60 GB or 80 GB SATA<br>Removable Solid State Drive: 30 GB, 60 GB  |
| Operating System             | Microsoft® Windows® XP Professional, SP3 or<br>Microsoft® Windows® 7 Professional**   |
| Physical Size<br>(H x W x D) | Metric = 63.5 x 336.6 x 146.1 mm<br>Standard = 2.5 x 13.25 x 5.75 in<br>Height with shock-isolating mount = 119.1mm (4.69in)  |
| Weight                       | 2.5 kg (5.45 lbs.)  |

### COMMUNICATIONS AND EXPANSION PORTS

|                         |  |
|-------------------------|--|
| PC-Card                 | One Type I/II CardBus, on front of CPU   |
| ExpressCard             | One 34 mm or 54 mm, on front of CPU  |
| GPI/O Port<br>(6 wires) | 2 General Purpose Outputs (battery level logic)<br>1 General Purpose Input (ground/float)<br>1 General Purpose Input (robust TTL level voltage sense)<br>1 Output (switched battery)<br>1 Input (ignition sense) |

### I/O PORTS

|                             |   |
|-----------------------------|---|
| RS232                       | Three (COM 1, COM 2, COM 3)   |
| USB                         | Four 2.0 (2 on front, 2 on back)<br>2 strain relief options<br>Additional 2 USB Option          |
| External Drive              | One eSATA (External Serial ATA) 150 MB/sec  |
| Ethernet LAN RJ45           | Intel® 1 Gb/sec Base-T  |
| Primary Display Interface   | Low Voltage Differential Signal (LVDS)  |
| Secondary Display Interface | Low Voltage Differential Signal (LVDS) (option*)  |
| Analog VGA                  | One RGB DB-15 connector   |
| FireWire                    | One IEEE 1394   |
| Audio                       | Speaker out (2W amplified)<br>Line in (non-amplified)<br>External Microphone in (non-amplified) |

\*Contact your sales representative for pricing and availability.

\*\* Microsoft® Windows® 7 Professional available only with Intel® Core™ 2 Duo T7500 processor

## INTERNAL RADIO OPTIONS AND COMMUNICATIONS PROTOCOLS\*

One internal PCI Express Mini Card Slot allows for a Wireless Local Area Network option or other PCI Express Mini cards

|      |   |
|------|---|
| WLAN | Intel® WiFi Link 5100 802.11 a/b/g/n (Wi-Fi Personal Area Network Capabilities)   |
| WWAN | Tri-band UMTS/HSDPA 3.6, Quad-band GSM/GPRS/EDGE or Dual-band CDMA 1xEV-DO-Rev A/1xRTT<br>Internal USB interface  |
| GPS  | Garmin 15xL:<br>Supports NMEA 0183 protocol Version 2.00 and 3.00.<br>WAAS enabled GPS receiver continuously tracks and uses multiple satellites to accurately compute and update your position to within 3 meters. Requires separate 3.3v tolerant antenna with SMA connector. |

## ELECTRICAL ENVIRONMENT

The M6 supports 12V operation so you can install into a vehicle without power converters.

|                      |  |
|----------------------|--|
| Power Source Options | Vehicle Battery 12V, Negative Ground   |
| Input Voltages       | 6 to 18VDC, with no loss of functionality  |
| Power Consumption    | At 13.8VDC:<br>Off $\approx$ 0.015 Amps<br>Hibernate Mode $\approx$ 0.015 Amps<br>Rest (display blanked) $\approx$ 2.42 Amps<br>Typical (display in day mode) $\approx$ 3.95 Amps<br>Maximum $\approx$ 4.60 Amps |

## POWER CONTROL MODULE

The M6 features a Power Control Module which initiates a graceful shutdown or hibernation of the system upon alarm.

The PCM monitors:

- Ambient temperature and prevents operation above 65.6°C and below -25°C to prevent CPU damage
- Battery voltage and allows for operation based on a voltage window
- Power supply's main rail output for operational performance
- Internal case temperature and provides a graceful shutdown
- Power supply cavity temperature and provides a secondary signal for blower operation
- Internal real time clock for time triggered events

## ENVIRONMENTAL & DURABILITY

The following specifications were third-party tested according to MIL-STD-810F methods.

|                       |  |
|-----------------------|--|
| Storage Temperature   | -40° C to +85° C (-40° F to +185° F)   |
| Operating Temperature | -25° C to +65.6° C (-13° F to +150° F) |
| Relative Humidity     | 5% to 95% (non-condensing) at 60° C    |
| Sealing               | IP54                                   |
| Shock                 | 75g at 11 ms half sine                 |
| Crash Hazard          | 100g at 2 ms half sine                 |
| Vibration             | Random 1g RMS, 5-500 Hz                |

## REGULATORY

|   |   |
|---|---|
| United States and Canada<br>Radiated Emission | FCC Part 15 Class B                     |
| Europe  | eMark Compliant<br>CE<br>RoHS Compliant |

## DISPLAYS

### 15.0 inch Display:

|                      |   |
|----------------------|---|
| Display type         | Active Matrix Color                             |
| Display resolution   | 1024 x 768 XGA                                  |
| Display viewing area | 15.0 inches diagonal                            |
| Brightness           | 1200 NITS                                       |
| Backlight type       | CCFL  |
| Viewing angle        | +/- 60 degrees                                  |
| Touch panel          | Capacitive                                      |
| Construction         | Heavy-gauge aluminum case                       |
| Dimensions           | 311.2 x 355.6 x 38.1 mm (12.25 x 14.0 x 1.5 in) |
| Weight               | 4.1 kg (9 lbs)                                  |

### 12.1 inch Display:

|                      |   |
|----------------------|---|
| Display type         | Active Matrix Color                         |
| Display resolution   | 1024 x 768 XGA                              |
| Display viewing area | 12.1 inches diagonal                        |
| Brightness           | 1200 NITS                                   |
| Backlight type       | LED   |
| Viewing angle        | +/- 80 degrees                              |
| Touch panel          | Capacitive or Resistive                     |
| Construction         | Heavy-gauge aluminum case                   |
| Dimensions           | 244 x 274 x 25 mm (9.025 x 10.995 x 1.0 in) |
| Weight               | 2.1 kg (4.64 lbs)                           |

### 8.4 inch Display:

|                      |   |
|----------------------|---|
| Display type         | Active Matrix Color                             |
| Display resolution   | 800 x 600 SVGA                                  |
| Display viewing area | 8.4 inches diagonal                             |
| Brightness           | 1000 NITS                                       |
| Backlight type       | LED   |
| Viewing angle        | +/- 60 degrees                                  |
| Touch panel          | Capacitive                                      |
| Construction         | Heavy-gauge aluminum case                       |
| Dimensions           | 186.7 x 209.6 x 27.0 mm (7.35 x 8.25 x 1.06 in) |
| Weight               | 1.3 kg (2.88 lbs)                               |

## KEYBOARDS

### Backlit Illuminated Keyboard with Touchpad:

- 82 key compact QWERTY design
- USB Connector
- Plastic injection molded top with metal bottom for ease of customizing mounting techniques
- 8 levels of backlight intensity
- Overall dimensions: 196.9 x 304.8 x 31.8 mm (7.75 x 12 x 1.2 in)
- Weight: <1 kg (<2 lbs)

### Watertight Rugged Duty Keyboard:

- 88 key compact QWERTY design
- USB Connector
- Fully sealed with integrated pointing device
- Watertight: NEMA 4
- 6 levels of backlight intensity
- Overall dimensions: 160 X 289.6 X 41.8 mm (6.3 X 11.4 X 1.7 in)
- Weight: <1 kg (<2 lbs)

# Hub-Data9II

Sales: 1819 Clarkson Road . Chesterfield, MO . 63017 p. 636.532.4911 . f. 636.532.4916  
Corporate: 2021 Challenger Drive . Alameda, CA . 94501 p. 510.865.9100 . f. 510.865.9090  
sales@data9II.com  
www.hub-data9II.com

