

Area C Mobile Computer Terminals Minimum Specs and Recommendations

(As of May 28, 2008)

MCT Specs

- Processor: Intel Core 2 Duo T7250 (2 GHz, 2M L2 Cache, 800MHz)
- Hard drive: 20 GB
- Operating System: Windows XP (Vista is currently untested)
- Resolution: 800x600-capable screen
- Monitor: Touch screen
- Keyboard: Backlit keyboards are nice in the dark
- RAM: 1 GB
- PCMCIA or Express card slot on mother board for possible future Sprint or Verizon wireless card
- Ports: 1 serial port, dedicated to VRM ONLY
1 USB port, dedicated to GPS ONLY
(Additional USB ports recommended – be sure they are easily accessible after installation)
- Ruggedized (MIL-STD-810F Compliant)- Created by the U.S. government, the MIL-STD-810F specifications cover a broad range of tests that measure the durability of equipment used under harsh conditions. These tests include drop-, shock-, moisture-, dust- and vibration-resistance, exposure to extremely low and high temperatures, and many others. Systems are offered from Dell, General Dynamics Itronix, Getac, Panasonic, and others that meet this specification.



Automatic Vehicle Location System

Area C units are currently equipped with the Garmin GPS 18 USB device, which constitutes both an embedded receiver and an antenna, able to track up to 12 satellites at a time with fast time-to-first-fix and precise navigation updates as often as every second (user configurable). It is waterproof and designed to withstand rugged operating conditions. Internal FLASH memory allows the GPS to retain satellite orbital parameters, last-known position, date and time. Uses real-time WAAS corrections to yield position errors of less than 3 meters. This USB device does not transmit NMEA (National Marine Electronics Asso.) sentences; it transmits using the Garmin USB interface.



GPS 18 USB
USB 2.0 full-speed version
(also compatible with USB 1.1 full speed hosts)

Satellite acquisition times:

Cold: ~ 45 sec.

Warm: ~ 15 sec.

Reacquisition: < 2 sec.

Suggested Reading

A review of some rugged laptops may be found at:

<http://www.computerworld.com/action/article.do?command=printArticleBasic&articleId=9082398>



Thinking Outside the Box

One of the Area C agencies is looking into an approach that several Area E agencies have tried, which is buying a new CPU when the time comes to purchase new MCTs, but continuing to use the old, fully functioning keyboards and screens to save some money. Ryan Phillips has some information on this approach.