# TREQ™
## Mobile Data Terminal

## Rugged Mobile Data Terminal

**Microsoft® Windows CE 5.0**

## FEATURES

**Standard:**

- Windows® CE 5.0 operating system

- 800x480 pixel, 178 mm (7") WVGA color TFT graphic LCD display

- Analog resistive touch screen

- Seven lighted, programmable function keys; lighted cursor key

- Two USB ports

- One serial port

- Built-in speaker and covert microphone

- Ambient light sensor

- Wide operating temperature

- Supports 12- or 24-volt vehicle power

**Options*:**

- One additional serial port

- One additional USB port

- Four general purpose digital I/Os

- Ethernet 10/100Base-T

- 802.11g wireless Ethernet

- GSM / GPRS modem

- Integrated GPS receiver

- J1708/1939 (CAN) interface

- Customizable logo and keypad

* Not all options available in all combinations



QSI Corporation's TREQ™ is a rugged mobile data terminal intended for use in a wide range of commercial vehicle applications. Patent pending.

The TREQ runs the Windows® CE 5.0 operating system. The terminal can be used for tasks ranging from vehicle systems control and monitoring to Automatic Vehicle Location (AVL) and Computer Aided Dispatching (CAD). The Windows operating system assures broad support for third-party hardware, software and application development.

## HARDWARE

**DISPLAY:** The TREQ features a TFT color WVGA (800x480) LCD display, 178 mm (7") diagonal size. This display has excellent readability under most lighting conditions.

**TOUCH SCREEN:** Most user input occurs through the resistive touch screen. This touch screen has high resolution and excellent performance.

**KEYS:** Along the bottom of the unit are eight lighted tactile elastomeric keys. All eight keys are independently programmable and are lighted with bi-color LEDs. The eighth key is designed to be used as a lighted cursor key, augmenting the touch screen functionality.

**HOUSING:** The TREQ features a tough polycarbonate housing designed to withstand everyday use in commercial vehicle environments. The unit is sealed to protect against dust and light liquid spills.

**PROCESSOR:** The TREQ is powered by the GEODE™ GX 500 processor (x86). The unit includes 128 Mbytes of RAM and 256 Mbytes of compact flash (upgradable).

**CONNECTORS:** On the back of the unit is a permanent integral cable with strain relief

**POWER SUPPLY:** The TREQ can be powered directly from 12- or 24-volt vehicle power, and includes circuitry to protect against normal variations (transients and spikes).

## SOFTWARE

**WINDOWS® CE 5.0:** The TREQ runs the Windows® CE 5.0 operating system. The Windows operating system assures broad support for third-party hardware, software and application development. The following industry-standard software development tools are supported:

Microsoft eMbedded Visual C++ 4.0 (with service pack 4)
Microsoft Visual Studio 2005

A TREQ Software Development Kit (SDK) is provided for use with these tools.

## QUICK SPECIFICATIONS

**DISPLAY**

TFT color WVGA LCD display, 256,000 colors
178 mm (7") diagonal
154 mm x 93 mm "live area"

| | |
|---|---|
| Pixels: | 800x480 |
| Dot Pitch: | 0.19 mm |
| Lighting: | CCFL lighting |
| | Brightness is software controllable |
| | Ambient light sensor (configurable) |

**TOUCH SCREEN**

Analog resistive

**INTERFACE**

Up to two serial ports (one full-flow EIA-232, one configurable to EIA-232, -422 or -485)
Up to three USB ports (one on front, one on back and one wired in cable)

| | |
|---|---|
| Options: | Ethernet 10/100Base-T |
| | 802.11g wireless Ethernet |
| | J1708/1939 (CAN) |
| | Four general purpose digital I/O lines |

**PROCESSOR**

AMD GEODE™ GX 500 (x86)

**MEMORY**

128 Mbytes RAM, 256 Mbytes compact flash

**SOFTWARE**

Windows® CE 5.0 Professional Plus

**COMMUNICATIONS**

| | |
|---|---|
| Options: | Tri-band GSM/GPRS modem |
| | Integrated 12-channel GPS receiver |

**AUDIO**

Built-in speaker, line-out via cable, covert microphone

**ENVIRONMENTAL**

| | |
|---|---|
| Temperature: | Operating -20 to 60 °C |
| | Storage -40 to 85 °C |
| Humidity: | 0 to 95% non-condensing |
| Vibration: | 10 to 1000 Hz, 4 g RMS |
| Shock: | 20 g, 11 ms, any axis |

Electrical transient and noise per J1455

**POWER**

8 to 32 VDC input voltage range (exceeds J1455)
12 watt average power consumption (1 A @ 12 VDC)