

# Mobile Data Terminals

Rugged computer hardware for demanding vehicle applications





# In It For The Long Haul



QSI began operations in 1983 as a manufacturer of low-power computers. Two years later we introduced our first rugged operator interface terminal for industrial OEMs. In 1995 we developed our first mobile data terminal for vehicle systems integrators. We take pride in our family of proven products, which offers a wide range of configurable features and options. If your needs require unique functionality, QSI offers custom terminal design and manufacturing services. Our commitment to quality of workmanship, service and support is second to none.

## Vehicle Terminal Products

QSI manufactures a broad range of highly-configurable mobile data terminals to suit your vehicle applications. You will find our terminals in vehicles ranging from long haul trucks to municipal buses, from service vehicles to taxi cabs. Because our focus is on hardware, QSI's mobile data terminals are an excellent choice for vehicle systems integrators and vehicle fleet managers, allowing you the freedom to create or customize a software solution for your application. Because we offer both standard and custom terminals, QSI has or can make a product to fit your needs: from inexpensive character terminals to full-featured Windows® CE vehicle computers.

QSI's mobile data terminals are capable of communicating via serial, Ethernet, USB and with various vehicle networks like J1708 and J1939 (CANbus). Options including WiFi, cellular modems, GPS, digital I/Os, and communication with a wide range of hosts and peripheral devices are also available.





# TREQ™ – The Workhorse For Your Workforce

Windows® CE 5.0 mobile data terminal with bright TFT display and resistive touch screen.

**TREQ™** Mobile Data Terminal

When it comes to an in-cab device for fleet management, dispatching, messaging, reporting, mapping and navigation, you require hardware that's robust enough to get the job done right. That's where the TREQ mobile data terminal comes in. With the Windows® CE 5.0 operating system, the TREQ insures broad support for custom application development, and third-party software and hardware.

Designed and built with years of rugged engineering experience, the TREQ™ mobile data terminal is guaranteed to perform in the field.



The Windows® CE 5.0 operating system allows you to develop applications in a familiar programming environment.



The AMD Geode™ GX 500 processor (x86) offers powerful graphic handling and computing capabilities.

## Start TREQing On The Right Foot

### TREQ™ Developer's Kit

We've made it easy for you to develop your own software or port existing applications for the TREQ™. With the TREQ™ Developer's Kit you get the hardware, connections, documentation and technical support you need, plus a Software Development Kit (SDK) for the TREQ™ Windows® CE 5.0 image.

Learn more about the TREQ Developer's Kit at: [treq.qsivehicle.com](http://treq.qsivehicle.com)

QSI strongly recommends that all customers developing software for the TREQ™ purchase a TREQ Developer's Kit.



# TREQ - Built Ready For The Road

With a wide operating temperature (-20 to 60 °C), 12-or 24-volt vehicle power input (meets J1455), industrially-hardened CE Certified components, high-resolution resistive touch screen and a tough polycarbonate housing, the TREQ™ is a great performer out in the field and is easy to read and operate even in harsh lighting conditions.



800x480 WVGA, 178 mm (7"), color, TFT graphic LCD display with resistive touch screen

Terminal can be customized with your product logo

Integrated GPS receiver\*

Integrated GPRS modem\*

Speaker for audible feedback

Lighted, programmable function keys with bi-color LEDs

Lighted multidirectional cursor key

Standard pedestal-mount configuration

USB port

Built-in covert microphone

Rugged polycarbonate housing

Ergonomic case for easy use

Integral cable with serial, Ethernet\*, J1708/1939\*, USB\*, GPIOs\*

USB port with cover

Built-in ambient light sensor

Heatsink for reliable operation in vehicle cabs

\*optional

## TREQ™-L Different models for different needs.

The TREQ-L is geared toward our budget-minded customers who require simplicity in the same rugged design as the TREQ. Using the same bright TFT display and Windows® CE 5.0 OS, the TREQ-L offers users a simple vehicle display with two USB and one serial port. To learn more, download the TREQ-L data sheet at: [treq.qsvehicle.com](http://treq.qsvehicle.com)



Want more information on available options?  
Download a data sheet at: [treq.qsvehicle.com](http://treq.qsvehicle.com)



# A Terminal For Every Vehicle

Mobile data terminals for your in-vehicle applications.



[www.qsivehicle.com](http://www.qsivehicle.com)

User programmable LEDs

Rubber overmolded boot for protection and ergonomics

320x240 QVGA, 96 mm (3.8") lighted graphic display (color\* or grayscale)



Shift and Power keys with LED indicators

Add your company logo\*

24- or 40-key customizable keypad legend

Multiple communication ports including serial and Ethernet\*

### Coming Soon:

- WiFi
- Rechargeable battery

\*optional

# Bright Graphics. Small Package

The VTERM™-G55 is a rugged handheld or panel-mount, graphic vehicle terminal.

When space is an issue, as it often is in a vehicle, the VTERM-G55 is the answer. This beauty features a bright graphic display, large keys, a rugged housing and the in-cab communication options you need. The Qlarity™ graphic programming environment is powerful and easy-to-use. Select from various options to configure your terminal.



## VTERM-G55

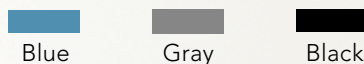
### Additional features:

- J1455 compliant vehicle power conditioner\*
- NEMA-4\* / NEMA-12 rated
- CE certified
- Programmable speaker
- 8 to 32 VDC power input

Also available in a panel-mount case.



Three standard case colors:



Download a VTERM-G55 data sheet at: [www.qsivehicle.com](http://www.qsivehicle.com)



# The Power Is In The Touch

The VTERM™-G70 mobile data terminal features a color graphic display with touch screen.



## VTERM-G70

### Features:

- 320×240 QVGA, 145 mm (5.7") lighted, STN color graphic LCD display. TFT, ETFT or grayscale optional
- Resistive touch screen and soft keys
- EIA-232, EIA-422 or EIA-485 serial interface
- Ethernet 10/100Base-T interface available as an option. Supports TCP/IP, Modbus™ and other protocols
- Power regulator for use with an 8 to 26 VDC supply
- Optional SAE J1455 compliant vehicle power conditioner
- 4 Mbytes of flash memory with 16 Mbytes RAM. Flash memory contains the firmware, user applications and file space
- 200 MHz Intel® XScale™ processor
- Speaker and real-time clock
- NEMA-4 rated and CE Certified
- Optional manufacturer's ID code to protect your development investment

# Big Graphics. Big Value

The VTERM™-G75 mobile data terminal features a large color graphic display with touch screen.



## VTERM-G75

### Features:

- 640×480 VGA, 264 mm (10.4") lighted, TFT color graphics LCD display
- Resistive touch screen and soft keys
- EIA-232, EIA-422 or EIA-485 serial interface
- Ethernet 10/100Base-T interface available as an option. Supports TCP/IP, Modbus™ and other protocols
- Power regulator for use with an 8 to 26 VDC supply
- Optional SAE J1455 compliant vehicle power conditioner
- 8 Mbytes of flash memory with 32 Mbytes RAM. Flash memory contains the firmware, user applications and file space
- 400 MHz Intel® XScale™ processor
- Speaker and real-time clock
- NEMA-4 rated and CE Certified
- Optional manufacturer's ID code to protect your development investment

Download the data sheets at: [www.qsivehicle.com](http://www.qsivehicle.com)



# Easy application design

Qlarity™ is QSI's object-based programming language for graphic terminal application design.

To get the most productivity from your terminals, we created Qlarity™ (pronounced "Clarity"). Even if you've never written a line of code, Qlarity makes application design easy — and we dare say, enjoyable. This scripted graphic terminal programming language relies on objects to display information on the screen. And with more than 100 objects to choose from, you're sure to find just what you need to make it simple.



Qlarity Foundry™ makes Qlarity application design easy with an intuitive GUI programming interface.

Qlarity Foundry™ is a Windows® design environment that assists in developing screens and applications for terminals based on the Qlarity language. Best of all, it's free and available for download at: [www.qlarity.com](http://www.qlarity.com)

## Design, simulate and run.

Whether you prefer the WYSIWYG approach to application design or are more comfortable writing code, Qlarity Foundry has both options to help you quickly design your application.

Simulate and debug your application at any time with Qlarity Foundry's simulation feature.

Easily download your application to the terminal via serial or Ethernet.

Learn more at: [www.qlarity.com](http://www.qlarity.com)



Simulation View



Code View

# Spell Out The Details

The VTERM™-J mobile data terminal is a great low-cost terminal featuring a character display.



VTERM-J

## Features:

- Supertwist, 20x4 character, LCD display. Lighted LCD or VFD display optional
- 18-, 24- or 40-key tactile keypad
- EIA-232, EIA-422 or 5-volt Buffered serial interface
- Parameters and configuration information stored in nonvolatile memory
- Rugged handheld or panel-mount housing
- Low power: EIA-232 unit uses only 28 mA from a 5 VDC supply (lighting off)
- Customizable keypad legend and company logo label
- NEMA-12/13 rated and CE Certified
- Optional manufacturer's ID code to protect your development investment

Download the VTERM-J data sheet at: [qsivehicle.com](http://qsivehicle.com)

# Get exactly what you need

When you require a custom terminal to meet a specific need, we will engineer it.

If you have unique requirements not met by our standard terminal configurations, we can design a custom terminal to meet your specifications. By leveraging our existing hardware and software technologies, we can decrease design time and project cost, while providing a complete custom terminal. Our professional in-house engineers and programmers can quickly design, test and deliver a working prototype of your custom terminal.

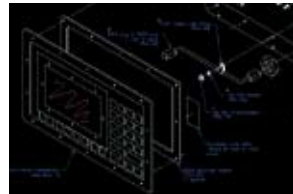
We utilize powerful, modern mechanical design technology and have over two decades of terminal manufacturing experience. Whether you need to add a keypad to an existing touch screen, modify a component, or build a completely new product from the ground up, we have the resources and expertise to design your custom mobile data terminals.



## Typical custom terminal workflow:



1. Choose a standard terminal with features similar to those you require.



2. Our electrical and design engineers customize the terminal to your exact requirements.



3. Working prototypes are built for in-house and customer testing.



4. Custom Terminal: Final modifications and testing are completed and your custom terminals are delivered.

For more about custom terminal design visit: [www.qsicorp.com/product/custom](http://www.qsicorp.com/product/custom)



## QSI Corporation Contact Information

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## Internet Resources

QSI Corporation [qsicorp.com](http://qsicorp.com)

Vehicle Terminals [qsivehicle.com](http://qsivehicle.com)

Custom Terminals [qsicorp.com/product/custom/](http://qsicorp.com/product/custom/)

Ordering [qsicorp.com/product/ordering/](http://qsicorp.com/product/ordering/)

Qlarity Download [qlarity.com](http://qlarity.com)

User Resources [qsiforums.com](http://qsiforums.com)

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