QTERM-G58

Low-cost, Rugged, Handheld Graphic Operator Interface Terminal with optional Battery and Wireless

WiFi

RoHS Compliant

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Low-cost, Rugged, Handheld Graphic Operator Interface Terminal with optional Battery and Wireless

WiFi · Qlarity™ Object-Based Programming · RoHS Compliant · CE

- 320x240 Color transflective sunlight-readable TFT LCD
- Rugged handheld ABS/polycarbonate case available in blue, gray or black with black elastomer overmold
- -20 to 60 °C operating temperature (-20 to 55 °C with wireless Ethernet option)
- Battery Option – internal lithium-polymer rechargeable, 10+ hours active life (optional)
- 802.11b/g wireless Ethernet (optional)
- USB device for mass storage for access
- Realtime clock
- Memory - up to 32 MBytes SDRM, up to 8 MBytes NOR flash, or up to 8 GBytes NAND flash
- NEMA-4 or -12 depending on configuration; NEMA 4 sealing for hose-down, icing and salt spray
- Serial port EIA-232 – Optional software-configurable EIA-232, -422, -485 multiport
- 24- or 40-key steel-dome membrane keypad; optional lighted keypad
- 4 or 5 programmable LEDs on keypad, plus shift and power LEDs
- 10/100Base-T or 10/100Base-TX wired Ethernet (optional)
- 8 - 32 VDC input
- Powerful Qlarity® object-based programming for easy application development
- Windows® programming, simulation and debugging environment
- Programmable speaker and .wav audio decoder (optional)
- CE Certified
- RoHS Compliant
- Make the QTERM-G58 *your* product with a custom key legend and company logo

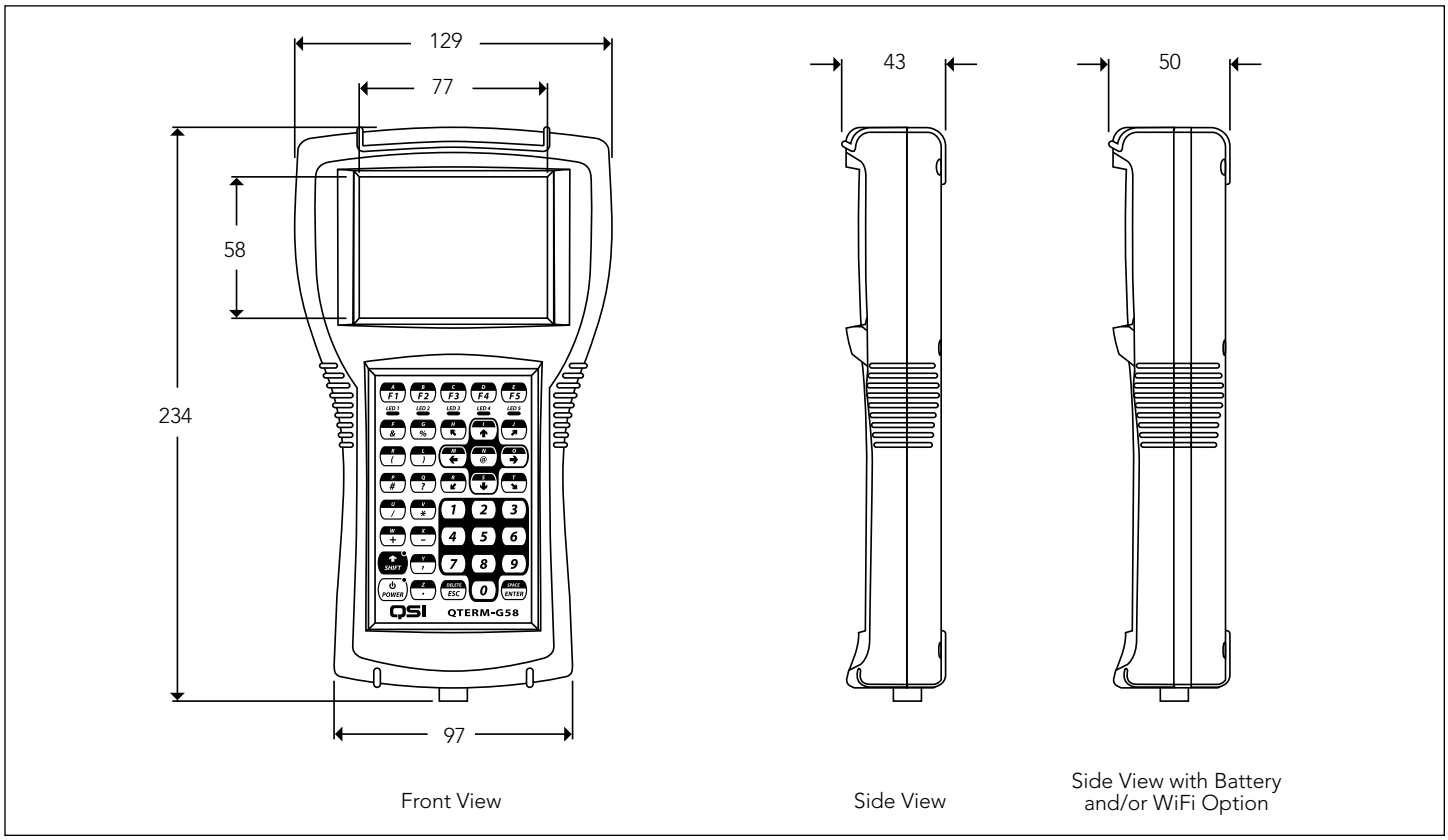
Overview

Starting at $459, the QTERM-G58 is a cost-effective, ultra-rugged handheld operator interface with a 3.5" (89 mm) color sunlight readable display. Ethernet, serial, USB, 802.11b/g wireless and battery power options are configured for your toughest applications. Our rigorous engineering and qualification testing makes this unit suitable for mobile and handheld applications such as from oil and gas, utilities, process control, agriculture, forestry and manufacturing.

User input occurs through a rugged 24- or 40-key membrane keypad with steel domes. The standard keypad comes with four or five LEDs under the soft keys that can be used as status or alarm indicators. The standard keypad legends can be customized specifically for your application and with your logo.

Robust object-based programming with Qlarity™ allows fast screen design and integration with your system requirements. Programming can be started immediately by downloading QlarityFoundry™ free from our website.

Speed up your development process and time to market with QSI's QTERM-G58; this wireless terminal is unparalleled in ruggedness and reliability. QSI has brought its design and manufacturing expertise to customers worldwide for 25 years.



QTERM-G58 housing dimensions shown in mm.

QTERM-G58 Modules and Features			
Feature	QTERM-G58/L	QTERM-G58/E	QTERM-G58/B
4 Mbytes NOR flash and 16 Mbytes SDRAM	√	√	√
256 Mbytes internal NAND flash for mass storage		√	√
8 to 32 VDC regulator	√	√	√
Internal battery pack and charger			√
USB Mass Storage		√	√
COM 1 EIA-232 with RTS/CTS	√		
COM 1 Serial Multiport (software-configurable EIA-232, EIA-422 or EIA-485)		√	√
10/100Base-T or 10/100Base-TX wired Ethernet		√	
NEMA-12	√	√	NEMA-4 only
Options			
802.11b/g wireless Ethernet	√		√
24- or 40-key membrane keypad	√	√	√
EL Keypad Lighting	√	√	√
Keypad legend (customizable)	√	√	√
E-Stop Switch (requires the integral cable option)	√	√	
NEMA-4	√	√	Standard
Audio WAV files	√	√	√
Integral Cable	√	√	
USB Host functionality information is available upon request			

QTERM-G58 Specifications

Feature	Detail	Description
Display	Color	320x240 Color transflective sunlight readable TFT LCD
	Color depth	262,144 color (limited to 256 by Qlarity)
	Size / Dot Pitch	89 mm (3.5") diagonal, 0.2235 mm
	Lighting	LED 220 cd/m² typical. Brightness is software-controllable
Keypad	Number of keys	24-key standard, 40-key optional
	Construction	Steel snap domes in membrane, 4 or 5 programmable LEDs, Power and Shift LEDs
	Lighting (optional)	Electroluminescent
	Legend customization (optional)	Prototype and custom legends are available
Interface	Serial port	EIA-232 serial port with RTS/CTS
	Serial multiport (optional)	Software-configurable EIA-232/422/485 serial multiprotocol port
	Baud rates	600, 1200, 2400, 4800, 6900, 14400, 129200, 38400, 57600, 115200
	Data formats	8n1, 8e1, 8o1, 8n2, 7e1, 7o1, 7n2, 7e2, 7o2
	Connector	Hirose HR30 12-pin sealed push-lock circular connector
	Connector (optional)	14 conductor integral cable with DB15 termination, 3 or 10 m
	Ethernet (optional)	10/100Base-T or 10/100Base-TX wired Ethernet
	USB device	USB 2.0 full speed device port for mass storage access
Memory	Flash	4 Mbytes NOR
	RAM	16 Mbytes SDRAM and 256 Mbytes internal NAND flash for mass storage
Wireless	802.11 b/g	Dual Antenna
	Authentication	WEP, WPA, WP2
	Encryption	WEP, PSK-TKIP, PSK-AES
	Modes	Infrastructure, Ad-hoc
Audio	Beep	Standard beep, software controllable in duration and pitch
	Speaker	Sealed 1 W 8 Ω speaker, 83 dB nominal at 100 mm, 1 W input power
	Audio decoder (optional)	Single channel digital decoder for .wav files
Housing	Handheld	ABS polycarbonate. Available in blue, gray or black with black overmolded elastomer boot
	UL	HB flame rating
	Size	Standard 129x234x43 mm
		Battery option 129x234x50 mm – battery and wireless Ethernet
	Mass	Standard 510 g | Battery option 665 g
Environmental	Sealing	Standard NEMA-12 | Optional NEMA-4 | Battery NEMA-4
	Temperature	Operating -20 to 60 °C (Standard) -10 to 50 °C (Prototype) -20 to 55 °C (Wireless Ethernet)
		Storage -30 to 70 °C
	Humidity	0 to 95%, non-condensing
	Vibration	5 to 2000 Hz, 4 g RMS
	Shock / drop	40 g, 11 ms, any axis / 1.5 m onto concrete
	FCC certification	FCC Part 15, Class A
	CE Certified	EN60950:1992, EN55022:1994 FCC Part 15, Subpart B, ICES-003, EN55024:1998
Processor	Type	Atmel ARM9 200 Mhz
Realtime clock	Standard	Standard, battery-backed, 1 second resolution
Power	Standard	8 to 32 VDC. Power switch on membrane keypad for quasi-full shutdown
	Battery power (optional)	Internal Lithium-polymer rechargeable battery pack (per model)
	Battery life	10+ hours active life, 3 hours recharge time
Other	E-stop (optional)	Two-pole, normally closed (requires integral cable option)
Software	Terminal operating system	Qlarity® – Object-based programming language
	Development environment	Qlarity Foundry® – Windows® design environment
Accessories	Cables, etc. (sold separately)	Cable, HR30 to Blank, 3 m or 10 m. Programming Cable, HR30 to USB Type A plug, 2 m. Battery charging cable, 120 volt AC or 12 volt C vehicle lighter plug. Holster