QTERM-G55

Handheld or panel-mount graphic terminal with object-based programming

- 320x240 pixels, lighted transflective FSTN gray scale LCD display measuring 96 mm (3.8") diagonal
- Handheld or panel-mount enclosure, or available as a module for tighter integration
- 24- or 40-key steel-dome membrane keypad; optional lighted keypad
- 4 or 5 programmable LEDs on keypad, plus shift and power LEDs
- 10Base-T Ethernet option; supports TCP/IP, UDP/IP and other protocols
- Power-over-Ethernet (802.3af) option
- Two serial ports (2nd optional) EIA-232, -422, -485 on either
- NEMA-4 or -12 depending on configuration. NEMA 4 sealing for hose-down, icing and salt spray
- -20 to 60 °C operating temperature; consumes 210 mA @ 12 VDC
- Powerful Qlarity® object-based programming for easy application development
- Windows® programming, simulation and debugging environment
- Programmable speaker, optional audio (.wav) decoder, optional real-time clock
- Manufacturer ID code protects your development investment
- CE Certified. Tough ABS/polycarbonate case available in blue, gray or black with black molded rubber boot
- Make the G55 your product with a custom key legend and company logo

Overview

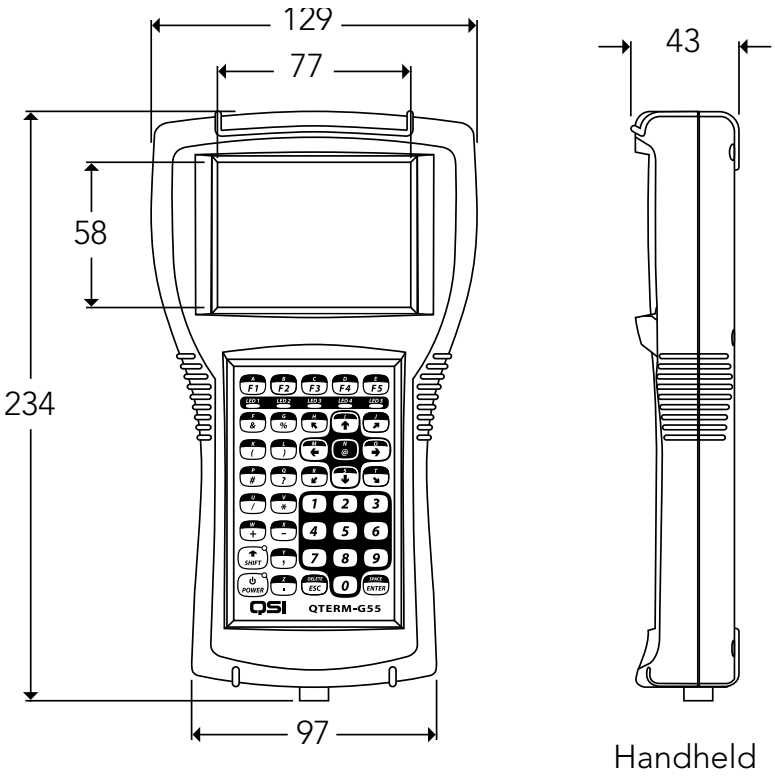
The QTERM-G55 features a QVGA, 320x240 pixel, LCD transflective FSTN, gray scale (16 shades) display.

Both displays use a light emitting diode (LED) backlight. The LED provides excellent readability under most lighting conditions and can operate in either portrait or landscape mode. The FSTN contrast is software-controlled and compensated for temperature. The transflective display provides excellent sunlight or high ambient light readability. The backlight provides white lighting for high contrast and easy readability. Brightness of the backlight and FSTN contrast are controlled by software.

User input occurs through a rugged 24-key or 40-key membrane keypad with steel domes. The top row of keys are commonly used as soft keys to navigate through a set of changing menus at the bottom of the display. The standard keypad comes with four or five LEDs under the soft keys that can be used as status or alarm indicators. Power and shift LEDs are included on both keypad configurations. The power button puts the terminal into a sleep mode.

The 40-key keypad allows for function/soft keys, eight-way directional control and numeric entry in the unshifted mode and alphanumeric data entry in the shifted mode. Keys can perform alternate functions when the shift key is enabled.

The QTERM-G55 comes in handheld or panel-mount format.

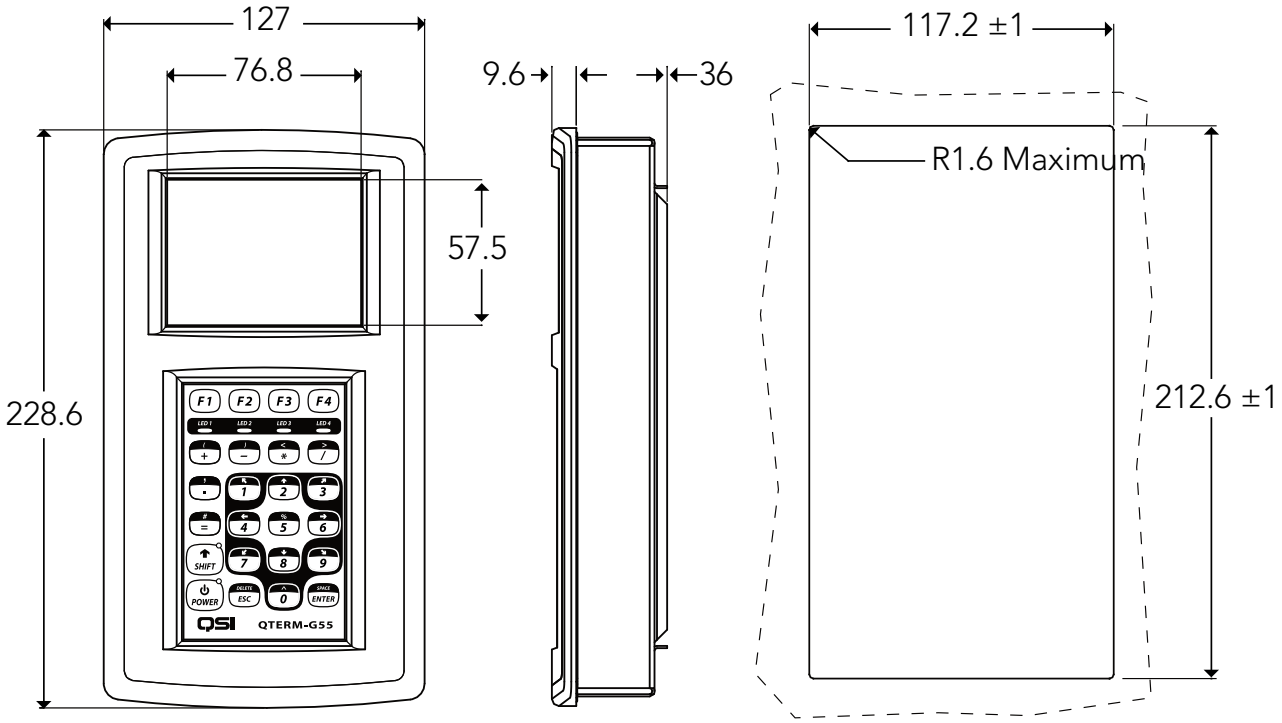


Handheld

The QTERM-G55 provides control and feedback for a PCB rework station.

A printing and packaging facility uses the QTERM-G55 to interface with their equipment.

Handheld housing dimensions and Panel-mount housing/cutout dimensions shown in mm.



Panel-mount

Panel-mount cutout

QTERM-G55 Specifications

Feature	Detail	Description	
Display	Gray scale	320x240 FSTN Transflective	
	Size	96 mm (3.8") diagonal	
	Dot Pitch	0.24 mm - FSTN; 0.227 - TFT	
	Contrast	Software-controllable, temperature-compensated	
	Lighting (optional)	LED backlight, brightness is software-controllable	
Keypad	Number of keys	24- or 40-key	
	Construction	Steel snap domes in membrane	
	Lighting (optional)	Electroluminescent	
	Legend customization (optional)	Prototype and Custom legends are available	
Interface	Serial port	EIA-232 hardware or software handshaking	
	Baud rates	200, 2400, 4800, 9600, 14,400, 19,200, 38,400, 57,600 and 115,200	
	Data formats	8n1, 8e1, 8o1, 8n2, 7e1, 7o1, 7n2, 7e2 and 7o2	
	Connectors	Handheld	12-pin round (Hirose HR30-8R-12SC) Integral cable with DB15f
		Panel-mount	DB9f (primary and secondary) 8-pin modular (RJ45) with Ethernet or Power-over-Ethernet
	Additional serial ports (optional)	Configurable primary and secondary serial ports – EIA-232, EIA-422 or EIA-485	
	Ethernet (optional)	10Base-T and Power-over-Ethernet	
Memory	Flash	2 Mbytes	
	RAM	16 Mbytes	
Audio	Speaker	Software programmable pitch and duration	
	Audio decoder (optional)	Decodes .wav audio files	
Housing	Handheld	ABS polycarbonate with overmolded rubber boot	
	Panel-mount	ABS polycarbonate with rubber overmold	
	UL	HB flame rating	
	Size	Handheld	129x234x43 mm
		Panel-mount	127x228.6x95.6 mm
	Mass	Handheld	520 g
		Panel-Mount	700 g
	Colors	Blue, Gray, Black	
Environmental	Sealing	NEMA-4 – Panel-mount (Handheld optional)	
		NEMA-12 – Handheld	
		IP-65 pending (both housing configurations)	
	Temperature	Operating	-20 to 60 °C (-10 to 50 °C with prototype legend)
		Storage	-40 to 85 °C
	Humidity	0 to 95%, non-condensing	
	Vibration	5 to 2000 Hz, 4 g-pk	
	Shock	20 g, 6 ms, any axis	
	Drop	1 m onto concrete (Handheld)	
	FCC Certification	FCC Part 15, Class B	
	CE Certified	EN60950-1:2001, EN55022:1998 FCC Part 15, Subpart B, ICES-003, EN55024:1998	
Processor	Type	ARM720T	
	Clock speed	77 Mhz	
Power	Standard	8 to 32 VDC or 5 VDC – 210 mA @ 12 VDC	
	Optional	Power-over-Ethernet (IEEE 802.3af)	
Software	Terminal operating system	Qlarity® – Object-based programming language	
	Development environment	Qlarity Foundry® – Windows® design environment	