QT-25/QT-PXI-25 uses a unique method to detect exact PCB short circuit locations and also pinpoint the shorted components / tracks. Ideally PCB tracks are supposed to have zero resistance, but in actual conditions they have small resistance. The exact location of the short is where the instrument reads the lowest value of resistance and this resistance could be detected with a sensitive instrument like QT25, even in power planes.

QT-25/QT-PXI-25 offers Offset Mode, where the residual resistance of a shorted component or nodes can be offset digitally, so that the instrument can be used at the largest sensitive range of 200 milli-ohms in order to locate the short.

QT-25/QT-PXI-25 is designed to apply a constant current with a voltage clamp of less than 200 millivolts, while detecting shorts in populated PCBs, so as to avoid turning on the semiconductor devices in the circuit, which could lead to misleading results.

The system comes with 2 sharp probes to poke through the insulation or solder mask in order to make a good contact.

QT-25/QT-PXI-25 uses 4-wire measurement technique for accuracy thereby eliminating the need to care about the residual probe resistance.

QT-25/QT-PXI-25 can also be used in measuring the contact resistance of switches and relays in its milli-ohm mode.

Resistance dependant, modulated frequency audio tone output (whose pitch increases with decreasing resistance value) is also provided.
**QT-25**

Offset switch to invoke the Offset mode, indicated by the offset symbol <> in the display panel. Also used to control the volume of the audio tone indication in conjunction with Range Selector switch.

Range Selector switch is a cyclic switch used for selecting the resistance range 200 Milli-Ohms, 2 Ohms, 200 Ohms. Range is displayed in concentric rectangles, with their size corresponding to the range selected.

16 Character Alpha Numeric Backlit LCD display to show the Resistance range selected, Offset indication, Resistance value, Unit etc. The 4-wire probe used for accurate measurement of the track resistance, etc.

**Offset Mode**: Offset capability upto 200 Ohms.

**QT-PXI-25**

3U cPCI / PXI Platform for rugged Environment
Hot Swap (Live Insertion / removal)
4 wire resistance measurement
Complimenting modulated audio tone
Resistance range of 200 milliohms, 2 ohms and 200 ohms.
100 micro ohm resolution in 200 milli ohm range
Offset capability upto 200 ohms

**SPECIFICATION**

<table>
<thead>
<tr>
<th></th>
<th><strong>QT-25</strong></th>
<th><strong>QT-PXI-25</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Resistance Range</td>
<td>200 milli-Ω (100 μΩ resolution)</td>
<td>200 milli-Ω (100 μΩ resolution)</td>
</tr>
<tr>
<td></td>
<td>2 Ω (1 mΩ resolution)</td>
<td>2 Ω (1 mΩ resolution)</td>
</tr>
<tr>
<td></td>
<td>200 Ω (100 mΩ resolution)</td>
<td>200 Ω (100 mΩ resolution)</td>
</tr>
<tr>
<td>Drive voltage</td>
<td>less than 200 mV (to avoid turning on semiconductor devices in circuit.)</td>
<td>less than 200 mV</td>
</tr>
<tr>
<td>Size</td>
<td>245(W)X65(H)X180(D)</td>
<td>100(H)X160(D) – to fit 3U slot</td>
</tr>
<tr>
<td>Weight</td>
<td>1.8 Kg</td>
<td>0.18 Kg</td>
</tr>
<tr>
<td>Power</td>
<td>10W @ 110/220V max.</td>
<td>5W @ 110/220V max.</td>
</tr>
</tbody>
</table>

Qmax reserves the right to change system specifications without prior notice; Qmax is the registered trademark.