



# PQube3-Pass-Thru™

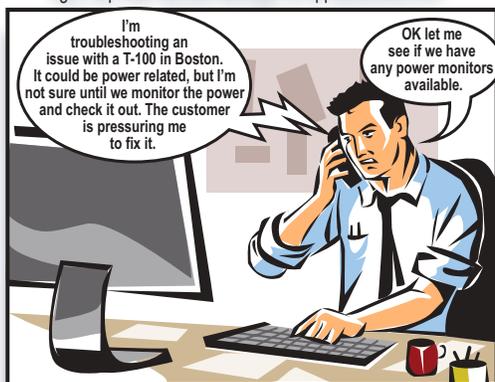
Power Quality Service Call in a Box



*PQ Guy says:  
This is the most economic  
and efficient way to  
monitor power generation  
and power quality —  
remotely! Designed to  
save costs for field service  
organizations. Buy or  
Rent.*



Max, the Field Service Manager for an electronics firm, gets a phone call from one of his support technicians.



- ▶ Plug-and-Play Power and Energy Monitoring
- ▶ Monitor and Diagnose Power Problems Remotely
- ▶ Quickly Confirm or Rule Out Power Problems
- ▶ Monitor and Record Wide Range of Power Conditions and Events
- ▶ Integral Cell Phone for Access and Control via Central Station

Medical diagnostic and laboratory equipment are expensive and sensitive devices. Keeping them operational is a mission-critical endeavor. When operational problems do occur, it's can often be the result of power quality problems. So, it's important to quickly assess the circuit to either rule out power as the problem or to pinpoint the condition.

The **POWERetc** PQube3-Pass-Thru (PPT) is a unique and efficient answer to identifying power quality issues and monitoring energy usage in sensitive medical electronic equipment. It's like having an expert visit your facility without the expensive service call.

All you need to do is unplug the equipment, plug the PPT into the wall receptacle and then plug the equipment into the PPT. It immediately begins monitoring the power for energy usage and a range of power quality conditions including voltage sags and swells, transients, under and overvoltage and harmonic distortion. And with its own IP address and cell phone connections, it automatically connects with **POWERetc's** monitoring station where it can be accessed, controlled and queried.

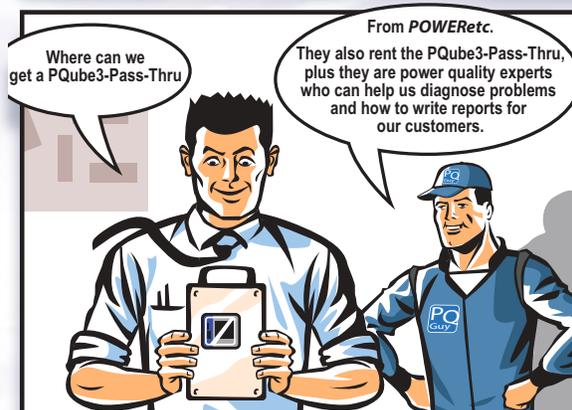
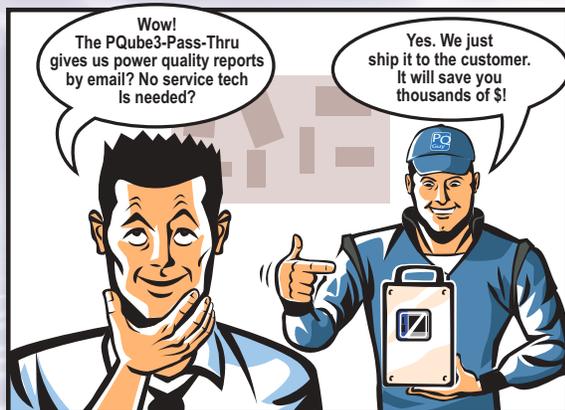
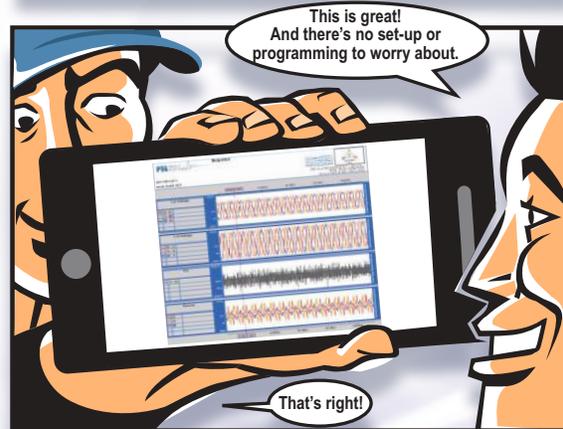
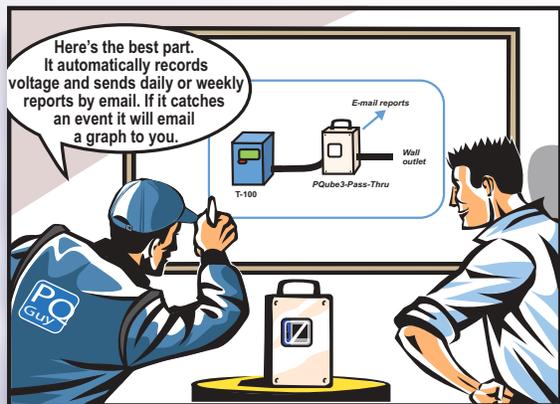
If power-related issues are the cause of the equipment malfunction, you'll know that quickly and a service call can often resolve the problem quickly with a single visit. And if the power isn't the problem, you can address other possible causes without concern about the power.

## PQube3-Pass-Thru™: Power Quality Service Call in a Box



The **POWER<sub>etc</sub>** PQube3-Pass-Thru (PPT) makes it easy to identify power quality problems without the time and expense of making multiple service calls.

The PPT is a valuable tool for every service department dealing with sensitive medical and laboratory equipment. The PQube3-Pass-Thru is available for sale or lease exclusively from **POWER<sub>etc</sub>**.







### Don't send a Technician, send Data!

Send the PQube3-Pass-Thru to the problem site. Upon power-up it will immediately start sending you power data by email (logs, trend graphs, disturbance events plus your choice of daily, weekly or monthly reports). If you want to change reports or interrogate the PPT to view parameters and waveforms, simply send it a command by email.



### Easy Access to Data

Access all data from PQube3-Pass-Thru from your cell phone, tablet or PC. No special software is needed. Just open your email! Setup and operational commands are also sent via the unit's restricted email address.

## PQube3-Pass-Thru Specifications

|                                     |  |
|-------------------------------------|--|
| Input Voltage                       | 120/240VAC, 50/60 Hz   |
| Measurement Channels                | Line-to-Neutral, Line-to-Line, Neutral-to-Earth  |
| Maximum Current Load                | 16A  |
| Power Quality Measurements          | Sags, swells, interruptions, impulses, flicker, rapid voltage changes, harmonics to 63rd, THD, TDD, interharmonics, unbalance Watts, VA, VAR, true pF, kWh   |
| Frequency Measurement Range         | 13.3 Hz to 23.3 Hz, 40 Hz to 70 Hz, 320 Hz to 560 Hz   |
| Sampling Rates                      | 512/256 Samples per cycle for RMS and power, user-selectable.<br>4 MHz for impulses  |
| Conducted Emissions                 | 2 kHz-150 kHz, ±60 V   |
| Accuracy                            | ±0.05% rdg ±0.05% FS typical (10% ~ 150% of nominal).  |
| RMS measurement method              | True single-cycle RMS, phase-locked to each channel, updated every 1/2 cycle.  |
| Reporting                           | Sends emails on every event with data attached in the form of GIF graphs, CSV spreadsheet files, PQDIF, HTML and XML summaries. Similarly, daily, weekly and monthly trends are sent by email. On demand, user can request real-time meters and reports. Control is via e-mail messages to change setups and get snapshots of power values and waveforms. Firmware upgrades via USB drive. |
| Communications                      | Ethernet cable, or via wireless cell modem. Cell modem is ideal for remote locations, or where connecting to a hardwired IP network is not practicable.  |
| Cellular Communications             | Verizon 4G for rental units. For purchased systems we can supply appropriate modems for most cell service providers, US and International. It is equipped with internal/external quadro-diversity antennas. Isolation > 7500 VDC isolation to Earth. UL/IEC 61010 reinforced insulation  |
| Security                            | Secure FTP-FTPS, HTTPS   |
| Environmental Monitoring (Optional) | Combines temperature/humidity/barometric pressure/shock & vibration in a USB sensor, up to two can be connected via USB cables   |