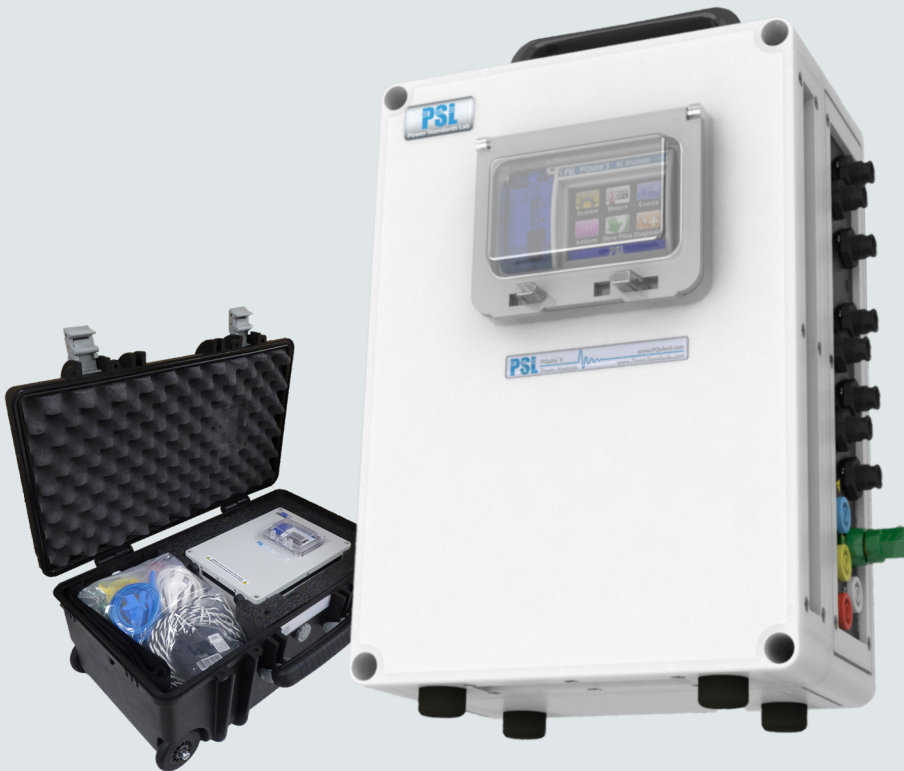


PQube® 3 Portable



FEATURES

- Easy to install, wire and operate
- Ready to plug flexible CTs, ready to plug fused voltage leads
- Self powers from the measured voltage (360~480VAC)
- Powers from 24VDC or with an external transformer 120~240VAC
- 30min battery power backup
- Voltage range 100~480VAC nominal, Current range (load phases 0~3000Amps)
- Power Quality Class A IEC 61000-4-30 Ed3
- Monitors AC and DC (4 additional analog inputs)
- Detects High-Frequency transients at 4MHz
- Records 2kHz~150kHz conducted emissions
- Optional 2 environment probes (temperature, humidity, barometric pressure, acceleration)

OVERVIEW

The PQube 3 Portable combines the powerful monitoring and communication capabilities of the PQube 3 Power Analyzer with the quick install feature of a portable instrument.

Designed for quick installation with Flexible CTs and fused voltage cables, it auto-detects frequency, nominal voltage and wiring configuration.

The PQube 3 Portable can be used standalone with a USB stick for configuration and data download. If connected to a network, it delivers event notifications and daily, weekly, monthly reports directly to your email inbox.

RESULTS

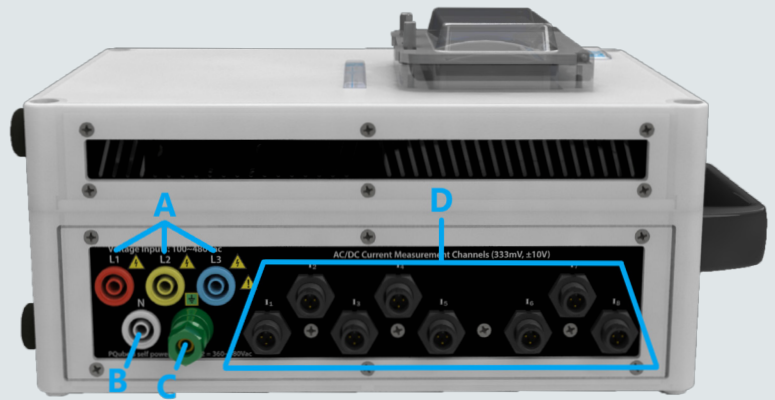


- Real-time readings via protocols: Modbus and SNMP
- Events recordings and graphs: CSV, GIF, and PQDIF
- Daily weekly, monthly trends and graphs: CSV, GIF, and PQDIF

Part Number: PQ3iaB-Portable-4V8I-XXXX-XXXX

PQube 3 Portable CONNECTIONS AND WIRING

A	L1, L2, L3 voltage inputs. Rated for ~100~480VAC, 50/60Hz.
B	Neutral terminal - optional depending on your power configuration
C	Earth terminal - Functional. Used as the reference point for voltage measurements.
D	Current transformer inputs - nominal 0.333V RMS (LOW range) or ±10v (HIGH range)
E	10/100 Ethernet RJ-45 port. 48V PoE compatible.
F	(2) Standard USB 1.0 ports for use ONLY with ENV2 environmental probes.
G	PQube 3 Analog & Digital I/O terminals.
H	24 VDC power supply input.



PQube 3 Portable TECHNICAL SPECIFICATIONS

Dimensions (L x W x H) of PQube 3 portable	8.5 in X 6 in X 12 in (metric: 21.59 cm X 15.24 cm X 30.48 cm),
Weight	Approx 10 lbs (4.5kg)
Dimensions (L x W x H) of carrying case	22 in X 9.5 in X 13.5 in (metric: 55.88 cm X 24.13 cm X 34.29 cm),
Weight w/ Accessories & carrying case	Approx 25 lbs (11.3kg)
Accessories included	<ul style="list-style-type: none"> -Carrying case -Power supply with power cable -100-240VAC input, 24VDC output -4x Rogowski coils CT -1x Split core 5A:0.333V current transformer -3x Fused voltage sensing leads (banana jacks), spare fuses -2x Non-fused cables with banana jacks and alligator clips -Hook-and-loop mounting straps -screwdriver
Operating Environment (temp., hum., alt.)	-20 ~ 45 °C, 5 ~ 95% RH (inside use), <2000 m above sea level (for EMC immunity, overvoltage, and other conditions, see full specs)
Internal memory	32 GB (holds over a year of data)***
Data backup	16 GB (up to 128GB) micro SD card or USB 2.0 thumb drive
Clock Synchronization	SNTP, NTP, and (optional) GPS
Output file types	GIF, text, CSV/Excel, and IEEE 1159-3 PQDIF
Communication ports	10/100 Ethernet RJ45 (optional external wireless or cell modem)
Communication	Ethernet port RJ-45, 10/100 (optional wireless and cell modem)
Communication protocols	Modbus/TCP, DNP 3.0, BACNET, SNMP with traps, FTP or HTTP (secure FTPS and HTTPS), and email

Part Number: PQ3iaB-Portable-4V8I-XXXX-XXXX

PQube 3 Portable MEASUREMENT FUNCTIONS	
Sampling rate	512 samples per cycle at 50 Hz / 60 Hz (applies to voltage, current, and analog channels)
VOLTAGE (4 inputs, referenced to earth)	L1, L2, L3, N, E Range: 0 ~ 750 VAC (L-N), 0 ~ 1300 VAC (L-L), impedance: 4.8MΩ
Voltage Magnitude*	L-L, L-N, L-E, and N-E. RMS over 1/2 cycle ($U_{rms1/2}$)
Frequency*	50 Hz, 60 Hz, 400 Hz, or 16.67 Hz
Unbalance (negative and zero sequence)*	IEC, GB, and ANSI methods
Flicker (Pinst, Pst, and Plt)*	IEC 61000-4-15
Voltage Harmonic & Interharmonic*	Volt or %H1, IEC 61000-4-7 Class 1, order up to 50th
Total Harmonic Distortion (THD)	%
High Frequency Impulse (voltage)	Records transient pulses on one channel (L1-E, L2-E, L3-E, or N-E) at 4 MHz sampling, or all four channels at 1 MHz, range: ± 6 kV
Conducted Emissions (2 ~ 9 kHz)*	Volts for L1-E, L2-E, L3-E : resolution 200 Hz bins, range 0 ~ 60 Vpk
(8 ~ 150 kHz)*	Volts for L1-E, L2-E, L3-E, and N-E: resolution 2000 Hz bins, range 0 ~ 60 Vpk
CURRENT (8 inputs, differential)	I1 ~ I8 Range: 0.333Vrms, 10Vpk, 0 ~ 6000 Amp with CTs, impedance: 33.3 kΩ
Current Magnitude*	RMS refreshed 1/2 cycle ($I_{rms1/2}$)
Peak Current	RMS over 1 sec, 1 min, or user defined (3 min ~ 1 hr)
Unbalance (negative and zero sequence)*	IEC, GB, and ANSI methods
Current Harmonics & Interharmonics*	Amp, order up to 50th
Total Demand Distortion (TDD) or Total Harmonic Demand Distortion (THDI)	Amp %
POWER (8 calculated channels)	I1 ~ I8 calculated with either L1-N, L2-N, or L3-N voltages
Total Power	Up to two (3-phase) loads
Peak Power	Intervals: 1 sec, 1 min, or user defined (up to one hour)
Reactive Power	VAR (per-phase and total)
Apparent Power	VA (per-phase, peak, and total)
Power Factor	TPF or DPF method (per-phase and total)
ENERGY (8 calculated channels)	I1 ~ I8 calculated with either L1-N, L2-N, or L3-N (energies are calculated)
Energy (import, export, & net)**	kWh (per-phase and total)
Reactive Energy (import, export, & net)	kVARh (per-phase and total)
Apparent Energy	kVAh (per-phase and total)
DIGITAL (1 differential input)	D+, D Digital threshold 1.5 V ± 0.2 V typical
ENVIRONMENT (Optional 2 ENV2 probes)	USB2, USB3 Temperature, Humidity, Barometric Pressure, Acceleration
RELAY (1 output, trigger programmable)	Activated on sag/swell, over/under frequency, overcurrent, inrush, waveshape change, HF Impulse, snapshot, and digital/analog events
	RLY1 30 V AC or DC, 300mA max, activates for event duration or 3 seconds (whichever is longer), 20 ms delay

* Meets or exceeds IEC 61000-4-30 Ed. 3 Class A
 ** Dependent on number of recorded events

Part Number: PQ3iaB-Portable-4V8I-XXXX-XXXX

ACCESSORIES INCLUDED

- Carrying case
- Power supply with power cable -100~240VAC input, 24VDC output
- 4x Rogowski coils CT
- 1x Split core 5A:0.333V current transformer
- 3x Fused voltage sensing leads (banana jacks), spare fuses
- 2x Non-fused cables with banana jacks and alligator clips
- Hook-and-loop mounting straps
- screwdriver



* Meets or exceeds IEC 61000-4-30 Ed. 3 Class A
** Dependent on number of recorded events