

POWERSIDE®

PQube® 3

Power Analyzers

and Accessories

Catalog



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PQube® 3

The PQube 3 series are Class A certified, high-speed revenue-grade power analyzers that identify, measure, and record power quality disturbances and environmental process parameter data in real-time. The PQube 3 boasts an impressive number of standard features including 8 energy metering channels, 4-quadrant metering, alarms, and push reporting. PQube 3 Power Analyzers are compact and easy to configure with auto-detection of the mains frequency, wiring configuration, and nominal voltage. Install them anywhere you need power analyzed in production equipment, data centers, or harsh environments.

- Auto-detects the mains frequency, wiring configuration and nominal voltage
- Connects directly to voltages up to 750 Vac (L-N)
- Certified for Class A power quality as per IEC 61000-4-30 Ed3
- Computes 4-quadrant ANSI Class 0.2 revenue-grade energy on 8 single-phase channels
- Monitors DC power and process parameters with four additional AC/DC analog channels
- Detects and records high-frequency impulses up to 4 MHz
- Measures in real time and records 2 kHz - 150 kHz emissions
- No software to install, built-in web and email server
- 32 GB of internal flash memory, can store years of data

Applications

- Semi-conductor manufacturing and semi-conductor tools
- Diagnostic imaging equipment systems in hospitals or health facilities
- Data centers, telecom equipment and towers
- Offshore platforms, marine vessels, or remote operation vehicles
- Airports and railway stations
- Commercial and Industrial facilities

Part Number: [PQube3-PQ-E08N-0000-XXXX](#)



PQube® 3e

The PQube 3e Class A certified, high-speed revenue-grade power analyzer identifies, measures, and records all power quality disturbances in real-time. Plus, it can replace four traditional revenue-grade meters as well as deliver environmental sensing and external process measurements.

Part Number: [PQube3-PQ-E08N-E06N-XXXX](#)



PQube® 3r

The PQube 3r is the best choice for protecting sensitive processes that need accurate detection of power disturbances and flexible alarm programming. PQube 3r has 4 built-in programmable relay outputs that can be individually assigned to a specific trigger condition associated to the type or severity of disturbance.

Part Number: [PQube3-PQ-E08N-03RL-XXXX](#)



PQube® 3v

When voltage quality compliance is required – that's when you need the PQube 3v. Great for monitoring at the point of common coupling (PCC), as well as diagnosing equipment malfunction.

- Connects directly to voltages up to 690 V
- Computes 4-quadrant ANSI Class 0.2 revenue-grade energy on 8 single-phase channels

Part Number: [PQube3-PQ-0000-0000-XXXX](#)



PQube® 3LV

The PQube 3lv connects to voltages up to 40V which is ideal for interfacing with MV sensors, or low voltage output signals.

Part Number: [PQube3-PQLV-E08N-0000-XXXX](#)



VAT2-600

Three-Phase AC Voltage Attenuator

A perfect solution to upgrade your Power Analyzer for dual voltage or dual power monitoring.

- Converts 0-600Vac 4-wire (Wye), 3-wire (Delta) or single phase to levels compatible with PQube 3 current input terminals.
- Includes 6" cable that connects VAT2-600 to the PQube3 current terminals.

Note: VAT2-600 can also be used as a DC voltage attenuator (see data sheet)

Part Numbers:

Module: VAT2-600-XXXX

Cable: CABLE-VAT2-AN-XXXX (connects VAT2-600 to PQube3 analog terminals).



ATT1-600V and ATT1-1200V

DC Voltage Attenuator

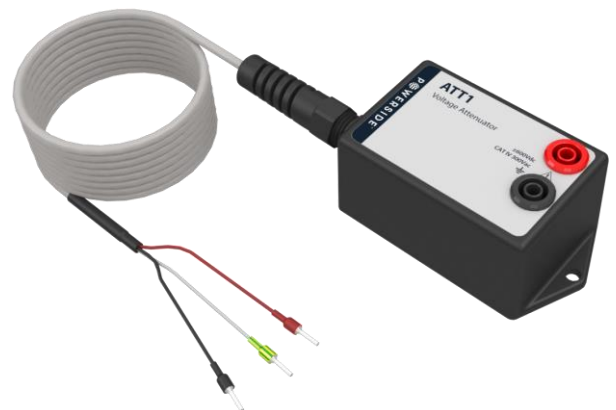
Compact voltage attenuator module for connection to PQube 3 analog channels. Great for DC data centers and other applications where high voltage DC monitoring is required. Can also be used to monitor high voltage AC.

For ATT1-600V

Part Number: ATT1-0600V-PQ3-XXXX

For ATT1-1200V

Part Number: ATT1-1200V-PQ3-XXXX



ATT2-600V and ATT2-1200V DC Voltage/Current Attenuator

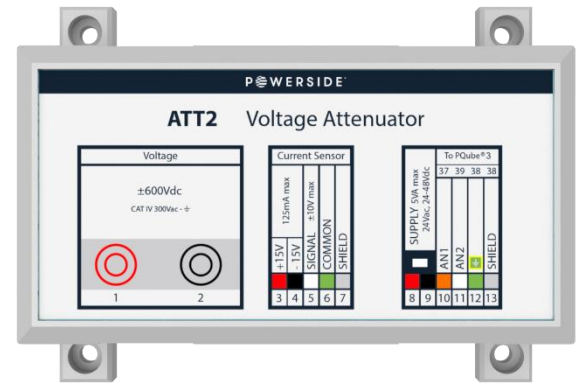
Compact voltage and current module for connection to PQube 3 analog channels. Great for applications where high voltage DC monitoring is required. Can also be used to monitor high voltage AC.

For ATT2-600V

Part Number: [ATT2-0600V-PQ3-XXXX](#)

For ATT2-1200V

Part Number: [ATT2-1200V-PQ3-XXXX](#)



CTI-5A and CTI-1A Module Interface to 5A/1A rated CT secondary circuits

CTI modules are useful when line currents are measured from existing current transformers. Those CTs deliver 5A/1A rated currents in their secondary circuits. The CTI module converts the 5A or 1A currents into voltage-compatible signals with PQube 3 inputs.

For CTI-1A

Part Number: [CTI-1A-XXXX](#)

For CTI-5A

Part Number: [CTI-5A-XXXX](#)



PM1

Power Manager Module

Power your PQube 3 from an electrical outlet: 100 to 240 Vac 50/60 Hz.

Part Number: [PM1-100~240-XXXX](#)



PM2

Power Manager Module with Aux Output

Power your PQube 3 from an electrical outlet: 100 to 240 Vac 50/60 Hz
The PM2 module has 4 outputs to power accessories (24 Vdc up to 5W).

Part Number: [PM2-100~240-XXXX](#)

PQube 3 by default powers up from 24 Vac, 24 to 48 Vdc sources directly.

UPS1

Uninterruptible Power Supply

Provides up to 30 minutes of backup power to PQube 3 and backs up modules and accessories connected to PM2 Module. Includes UPS operation and charging LED indicators.

Part Number: [UPS1-30-XXXX](#)



UPS2 + XB1 + XB1D

Extended Power Backup Package

The package contains: external battery controller (UPS2) + Battery pack (XB1) + DIN rail mount (XB1D)

- Provides extended power backup (up to one hour)
- Wide temperature range (-4 to 149°F/-20°C to 65°C)

Part Numbers:

Module Package: [UPS2-XBC-XXXX](#)

Battery: [BATTPACK-6V-2.5Ah-XB1-XX](#)

Battery Bracket: [BATTBRKT-XB1-XX](#)



UPS3 + XB1 + XB1D

Extended Power Backup Package with Accessory Backup

The package contains: external battery controller (UPS3) + Battery pack (XB1) + DIN rail mount (XB1D)

- Provides extended power backup (up to one hour)
- Wide temperature range -20°C to 65°C (-4 to 149°F)
- Auxiliary supply to back up accessories rated at 20 Vdc, up to 5W

Part Numbers:

Module Package: [UPS3-XBC-XXXX](#)

Battery: [BATTPACK-6V-2.5Ah-XB1-XX](#)

Battery Bracket: [BATTBKRKT-XB1-XX](#)



XB1

Extra Battery Pack for UPS2 and UPS3

For use with UPS2 and UPS3 Battery Controller. Provides up to 60 minutes of backup for PQube 3. Battery is rated at -40°C to +80°C temperature range.

Part Number: [BATTPACK-6V-2.5Ah-XB1-XX](#)

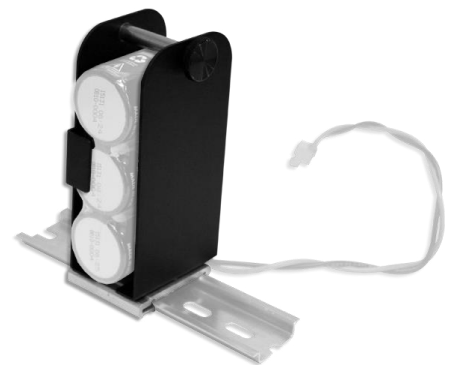


XB1D

External DIN Rail Mount for XB1

DIN rail mount for XB1 External Battery Pack.

Part Number: [BATTBKRKT-XB1-XX](#)



Ultra-Precise CT Series

Powerside Ultra-Precise CTs are split-core for easy installation and calibrated to meet revenue class accuracy applications. The secondary cable is shielded, enabling immunity from external electrical noise.

The Powerside Ultra-Precise CTs exceeds the Class 0.2 accuracy:

ANSI C12.20 Class 0.2 revenue grade*

(*) Class 0.2S IEC 62053-22

Rated currents: 5A to 300A

Output: 333 mV at rated current



Precise CT Series

Powerside Precise CT – SCN Series

Rated currents: 5A to 600A

Powerside Precise CT – SC4 Series

Rated currents: 800A to 6000A

Output: 333mV at rated current



Flexible Current Sensor

Rogowski Coil with easy Installation and voltage outputs that connect directly to PQube 3 (integrator and external power not required)

Measured Range: 0 to 3000A

Part numbers:

16" Loop: [FCT-16-3000A-00](#)

24" Loop: [FCT-24-3000A-00](#)

36" Loop: [FCT-36-3000A-00](#)

48" Loop: [FCT-48-3000A-00](#)



DC Hall Effect Current Sensors

For use to measure DC current with the ATT2 module in DC measurement applications.



ENV2

EnviroSensor

Measure ambient temperature, humidity, barometric pressure, and three-axis acceleration.

- Mechanical shock events – detect accidental bumps to sensitive equipment
- Seismic disturbances – records pre- and post-earthquake accelerations
- PQube 3 supports up to two EnviroSensor Probes – use for comparison (for example, detect clogged air filters with differential barometric pressure)

Part Numbers:

ENV2 with 6 ft (2m) USB cable: [ENV2-THPA-2M-XX](#)

ENV2 with 15 ft (5m) USB cable: [ENV2-THPA-5M-XX](#)

6 ft (2m) USB cable: [ENV-CABLE-2M-XX](#)

15 ft (5m) USB cable: [ENV-CABLE-5M-XX](#)

15 ft (5m) Extension cable: [ENV-EXT-CABLE-5M-XX](#)



RM8

Relay Extension Module

The PQube 3 RM8 extension module can be used as a powerful controller to command the shedding of loads to protect your main distribution circuit from tripping.

It easily connects to your PQube 3 and has 8 programmable relays that are programmed in the PQube 3 Configurator software. Custom load shedding schemes can be applied by assigning incremental thresholds and protection schemes can be applied to protect up to 4 loads.

Part Number: [RM8-08R2-XXXX](#)



GPS-R

GPS Time Synchronization for PQube 3

The GPS-R module allows you to precisely time stamp the measurements of the PQube 3. The package consists of:

Part Numbers:

- GPS-R Time Sync Module: [GPSR-00-MX](#)
- GPS-R Module, Antenna, 6' Cable Package: [GPSR-00-PA](#)
- Disc Antenna and 6' Cable: [CABLE-ANT-GPSR-6FT-00](#)
- Disc Antenna: [ANT-00-GPSR-00](#)



Aluminum DIN-Rail Kit

Your PQube easily snaps onto standard 35 mm DIN rail. For your convenience Powerside offers the DRK kit which includes one piece of aluminum DIN rail that is approximately 10.63 in (270 mm) long, as well as two end stops for locking the PQube modules in place.

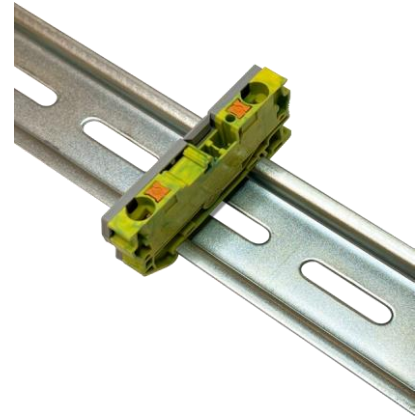
Part Number: [DRK-270-00](#)



Shield Wire Grounding Terminal

Grounding terminal with end cap and 2 ports for grounding up to 8 shielded wires.

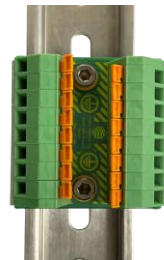
Part Number: [TB-GND-6.2MM-XX](#)



Shield Wire Grounding Block

Grounding block with individual terminals, up to 16 shielded wires.

Part number: [SWG-16-00](#)



DIN Rail Enclosure

IP65 DIN Rail Enclosure for PQube 3 and PQube Classic

If you want your PQube 3 in its own enclosure, there are enclosure options with built in DIN rail mounting provisions. This solution is easy, cost effective, and assists when you need more accessibility or have space constraints.

Part Numbers:

7.2" W x 7.1"H x 4.84" D: [ENCL-EXT-775-XX](#)

10" W x 7.1"H x 4.84" D: [ENCL-EXT-1075-XX](#)

10" W x 14.2"H x 4.84" D: [ENCL-EXT-10145-XX](#)

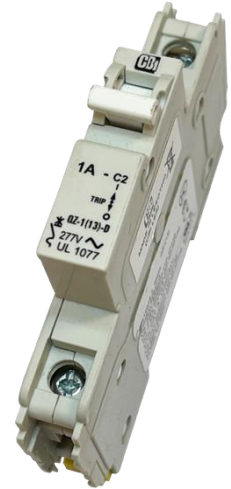


CB-1P

1 AMP Single Phase Circuit Breaker

Single-phase circuit breaker for protecting the PQube in single-phase applications. Simple DIN rail mounting allows breaker to be snapped in alongside your PQube modules. UL 1077: 277/480 volt, 1A rating.

Part Number: [CB-1P-277/480V-1A](#)



CB-3P

1 AMP Three Phase Circuit Breaker

Three-phase circuit breaker for protecting PQube in three-phase applications. Simple DIN rail mounting allows breaker to be snapped in alongside your PQube modules. UL 1077: 277/480 volt, 1A rating.

Part Number: [CB-3P-277/480V-1A](#)



Rugged Pole-Mount Package

The PQube 3 is perfect for distribution line monitoring. The enclosure is IP44 rated, vented for temperature reduction, made from non-corrosive polycarbonate, and the pole-mount brackets make for a quick and secure installation. The cellular modem-ready option is ideal for collecting data where Ethernet connectivity is often unavailable. Power can be taken from the monitored line, or from a separate instrument power transformer.

- PQube 3 power analyzer, pre-packaged in an IP44 rated rugged polycarbonate indoor/outdoor enclosure with pole-mount brackets
- Quick connect terminal blocks for easy field wiring
- Range of measured nominal voltage: 50 to 690 VAC
- Range of self-powered voltage: 100 to 277 and 400 to 500 VAC
- Eight current channels and a wide range of CT options including split-core CTs (5 to 6000 A) or flexible Rogowski CTs (3000 A)
- Relay output, analog and digital inputs
- PQube 3 is powered from measured voltage and comes with 1-hour battery backup
- Just drill holes for your conduit or cable glands, connect wiring, and you're ready to go
- Internal enclosure temperature rating: -20 to +60°C

Models

- Base Rugged Pole model:

Part Number: [PQ3iaB-Rugged-Pole-000-0000-000-XXXX](#)

- Modem ready model:
Includes a modem mounting plate, two indoor/ outdoor antennas, internal wiring and 24Vdc modem power (modem not included).

Part Number: [PQ3iaB-Rugged-Pole-M24-0000-000-XXXX](#)

- Modem ready with GPS time synchronization model:

Part Number: [PQ3iaB-Rugged-Pole-M24-GPSR-000-XXXX](#)



Rugged Wall-Mount Package

The Rugged Wall-Mount product is suitable for applications requiring easy PQube accessibility in a rugged indoor or outdoor wall-mount installation. The enclosure is IP44 rated, vented for warmer conditions, and contains a hinged window for viewing or accessing the PQube 3's full color touchscreen display. Quick-connect terminal blocks are included for simple wiring, and the cellular modem-ready option helps with remotely accessible data.

- PQube 3 Power Analyzer, pre-packaged in an IP44 rated rugged polycarbonate indoor/outdoor wall-mount enclosure
- Hinged window for color touchscreen display viewing or access
- Quick connect terminal blocks for easy field wiring
- Range of measured nominal voltage: 50 to 690Vac
- Range of self-powered voltage: 100 to 277 and 400 to 500Vac
- Eight current channels and a wide range of CT options including split-core CTs (5 to 6000A) or flexible Rogowski CTs (3000A)
- Relay output, analog and digital inputs
- PQube 3 is powered from measured voltage and comes with 1-hour battery backup
- Just drill holes for your conduit or cable glands, connect wiring, and you're ready to go
- Internal enclosure temperature rating: -20 to +60°C

Models

- Base Rugged Wall Mount model:

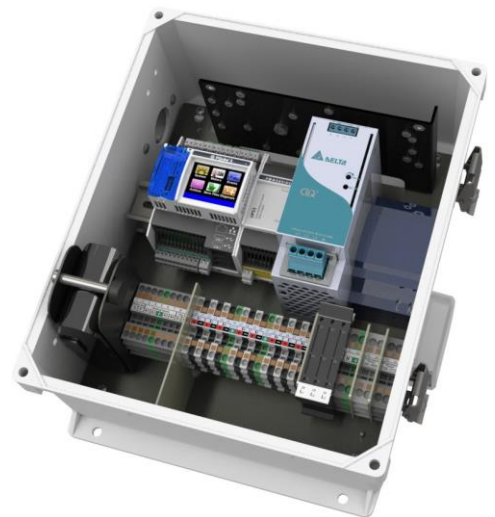
Part Number: [PQ3iaB-Rugged-Wall-000-0000-000-XXXX](#)

- Modem ready model:
Includes a modem mounting plate, two indoor/ outdoor antennas, internal wiring and 24Vdc modem power (modem not included).

Part Number: [PQ3iaB-Rugged-Wall-M24-0000-000-XXXX](#)

- Modem ready with GPS time synchronization model:

Part Number: [PQ3iaB-Rugged-Wall-M24-GPSR-000-XXXX](#)



PQube® 3 Accessories Table

Accessories		PQube 3, 3e, 3r	PQube 3v	PQube 3LV	Rugged Wall Mount	Rugged Pole Mount
AC/DC Interface Module	VAT2-600: Three-Phase AC Voltage Attenuator	✓	–	✓	–	–
	ATT1-1200V – DC Voltage Attenuator (1200VDC/600VAC)	✓	✓	✓	–	–
	ATT1-600 V - DC Voltage Attenuator (600 VDC/300 VAC)	✓	✓	✓	–	–
	ATT2-1200 V - DC Voltage/Current Interface (1200 VDC/600 VAC)	✓	✓	✓	–	–
	ATT2-600V – DC Voltage/Current interface (600VDC/300VAC)	✓	✓	✓	–	–
	CTI-1A CT Interface Module	✓	–	✓	–	–
	CTI-5A CT Interface Module	✓	–	✓	–	–
Power Supply Backups	PM1 Power Manager Module	✓	✓	✓	–	–
	PM2 Power Manager Module with AUX Output	✓	✓	✓	–	–
	UPS1 Uninterruptable Power Supply	✓	✓	✓	–	–
	Extended Power Backup Package: UPS2 + XB1 + XB1D	✓	✓	✓	–	–
	Extended Power Backup Package with Accessory Backup: UPS3 + XB1 + XB1D	✓	✓	✓	–	–
	XB1 – Extra Battery Pack for UPS2 AND UPS3 (Spare Parts)	✓	✓	✓	✓	✓
	XB1D - External DIN Rail Mount for XB1	✓	✓	✓	–	–
Current Sensors	Powerside Ultra-Precise CT Series	✓	–	✓	✓	✓
	Powerside Precise CT Series	✓	–	✓	✓	✓
	DC Hall Effect Current Sensors	✓	✓	✓	✓	✓
	FCT-XX-3000A Flexible Current Sensors	✓	–	✓	✓	✓
Peripherals	ENV2 - EnviroSensor	✓	✓	✓	✓	✓
	RM8 – Relay Extension Module	✓	✓	✓	–	–
	GPS Time Synchronization for PQube 3	✓	✓	✓	–	–
Installation Accessories	Aluminum DIN-Rail Kit	✓	✓	✓	–	–
	Shield Wire Grounding Block	✓	✓	✓	–	–
	Shield Wire Grounding Terminal	✓	✓	✓	–	–
	DIN Rail Enclosure	✓	✓	✓	–	–
Circuit Breaker	CB-1P - 1AMP Single Phase Circuit Breaker	✓	✓	✓	–	–
	CB-3P - 1AMP Three Phase Circuit Breaker	✓	✓	✓	–	–





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