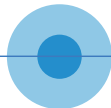








P  **WERSIDE**®

**PQube 3,
PQube 3 Rugged,
Accessories,
Modules & Kits**



PQUBE 3

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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 in real-time all power quality disturbances and environmental process parameter data.

PQube 3's boast an impressive number of standard features including 8 energy metering channels, 4-quadrant metering, alarms, and push reporting.

PQube's are built sturdy and compact, the size of a Rubik's cube. 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 690 V
- 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 at 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, holds years of data

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 in real-time all power quality disturbances. Plus it can replace four traditional revenue-grade meters as well as deliver environmental sensing and external process measurements.

- Auto-detects the mains frequency, wiring configuration and nominal voltage
- Connects directly to voltages up to 690 V
- Certified for Class A power quality as per IEC 61000-4-30 Ed3
- Computes 4-quadrant ANSI Class 0.2 revenue-grade energy on 14 single-phase channels
- Monitors DC power and process parameters with four additional AC/DC analog channels
- Detects and records high-frequency impulses at 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, holds years of data

Part Number: [PQube3-PQ-E06N-0000-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.

- Auto-detects the mains frequency, wiring configuration and nominal voltage
- Connects directly to voltages up to 690 V
- 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
- 4 programmable relay outputs can be assigned to disturbance types
- Monitors DC power and process parameters with four additional AC/DC analog channels
- Detects and records high-frequency impulses at 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, holds years of data

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.

- Installs easily with an ultra-compact footprint
- Connects directly to voltages up to 690 V
- Certified for Class A power quality according to IEC 61000-4-30 Ed3
- Monitors DC power and process parameters with four additional AC/DC analog channels
- Detects and records high-frequency impulses at 4 MHz
- Measures in real time and records 2 kHz to 150 kHz emissions
- Auto-detects the mains frequency, wiring configuration and nominal voltage
- Holds years of data and thousands of events via 32 GB of internal flash memory

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



VAT2-600: THREE-PHASE AC VOLTAGE ATTENUATOR

A perfect solution to upgrade your PowerAnalyzer 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)

Order Part Number: VAT2-600-XXXX

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



ATT1-600V - DC VOLTAGE ATTENUATOR

Compact voltage attenuator module for connection to PQube Classic or 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.

PQube Classic Part Number: ATT1-600V-XXXX

PQube 3 Part Number: ATT1-600V-PQ3-XXXX



ATT1-1200V - DC VOLTAGE ATTENUATOR

Compact voltage attenuator module for connection to PQube Classic or 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.

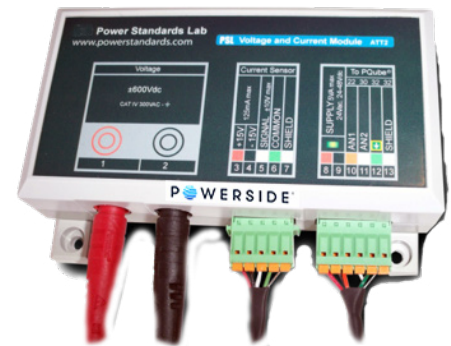
PQube Classic Part Number: [ATT1-1200V-XXXX](#)
 PQube 3 Part Number: [ATT1-1200V-PQ3-XXXX](#)



ATT2-600V - DC VOLTAGE / CURRENT ATTENUATOR

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

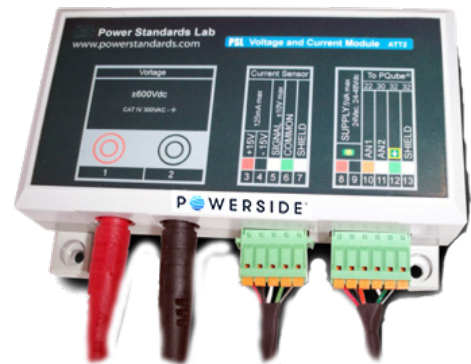
Order Part Number:
 PQube Classic Part Number: [ATT2-600V-XXXX](#)
 PQube 3 Part Number: [ATT2-600V-PQ3-XXXX](#)



ATT2-1200V - DC VOLTAGE / CURRENT ATTENUATOR

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

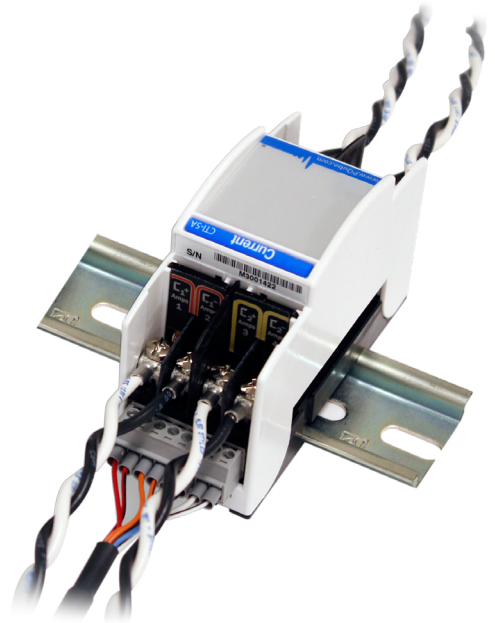
PQube Classic Part Number: [ATT2-1200V-XXXX](#)
 PQube 3 Part Number: [ATT2-1200V-PQ3-XXXX](#)



CTI-5A CT INTERFACE MODULE

Connect your PQube 3 to five-Amp output current transformers. Ideal for measuring currents from existing metering/protection/instrumentation current transformers.

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



CTI-1A CT INTERFACE MODULE

Connect your PQube 3 to one-Amp output current transformers. Ideal for measuring currents from existing metering/protection/instrumentation current transformers.

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



POWERSIDE ULTRA-PRECISE CT SERIES

Powerside Ultra-Precise calibrated shielded split-core CT are specifically designed to meet demanding accuracy applications. This is accuracy on both current amplitude AND current angle accuracy.

The Powerside Ultra-Precise CT's exceed the most demand standard:
 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



POWERSIDE 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

Easy Installation – v connects directly to PQube 3 (integrator and external power not required)

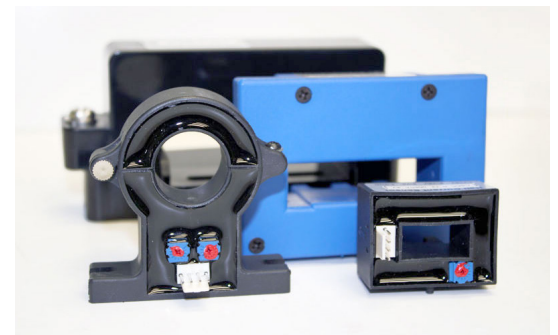
Measured Range : 0 to 3000A

Order part numbers: [FCT-24-3000A-XX](#)
 Order part numbers: [FCT-36-3000A-XX](#)
 Order part numbers: [FCT-48-3000A-XX](#)



DC HALL EFFECT CURRENT SENSORS

For use with [ATT2 – AC/DC Voltage/Current Module](#)



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)

Order Part Number: [ENV2-THPA-2M-xx](#)

Order Part Number: [ENV-CABLE-5M-XX](#)

Order Part Number: [ENV2-EXT-CABLE-5M-xx](#)



PM1 - POWER MANAGER MODULE

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

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

Order Part Number: PM1-100 to 240-00



PM2 - POWER MANAGER MODULE WITH AUX OUTPUT

Power your PQube 3 from an electrical outlet : 100to 240 Vac 50/60 Hz
The PM2 module has 4 outputs for accessories (20Vdc up to 5W)

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

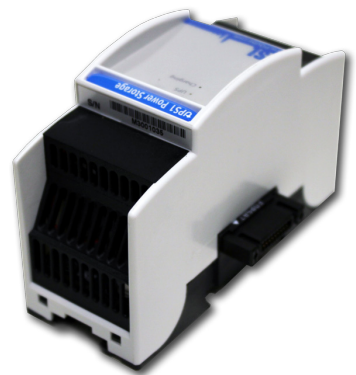
Order Part Number: PM2-100 to 240-00



UPS1 - UNINTERRUPTIBLE POWER SUPPLY

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

Order Part Number: UPS1-30-XXXX



EXTENDED POWER BACKUP PACKAGE: UPS2 + XB1 + XB1D

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 (-25°C to +60°C)

Order Part Number: UPS2-XBC-XXXX

Order Part Number: BATTPACK-6V-2.5Ah-XB1-XX

Order Part Number: BATTBRKT-XB1D-XX



EXTENDED POWER BACKUP PACKAGE WITH ACCESSORY BACKUP: UPS3 + XB1 + XB1D

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 (-25°C to +60°C)
- Backs up accessories up to 5W

Order Part Number: UPS3-XBC-XXXX

Order Part Number: BATTPACK-6V-2.5Ah-XB1-XX

Order Part Number: BATTBRKT-XB1D-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.

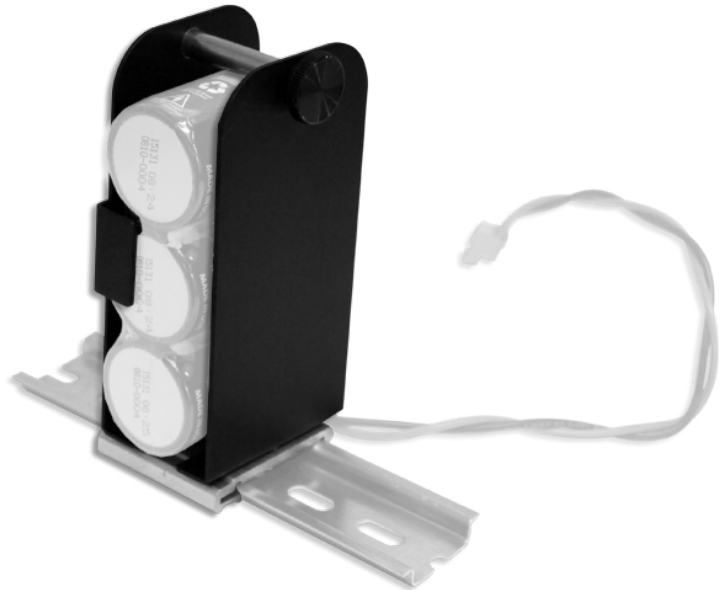
Order Part Number: [BATTPACK-6V-2.5Ah-XB1-XX](#)



XB1D - EXTERNAL DIN RAIL MOUNT FOR XB1

DIN rail mount for XB1 External Battery Pack.

Order Part Number: [BATTBRKT-XB1-XX](#)



GPS SYNCHRONIZATION PACKAGE FOR PQUBE 3

This bundle package allows you to time stamp precisely the measurements of the PQube 3.

The package consists of :

- An optical isolated remote GPS receiver and antenna (GPS1-ISOL-XXXX)
- A snap-in synchronization module for PQube 3 (MS1-PPS-XT-XXXX)
- 9m (30ft) cable to connect the synch module to the receiver and antenna (CABLE-GPS-8P-RJ45-09M-00)

Order Part Number: [GPS-SYNC-MS1-GPS1](#)



RM8 - RELAY EXTENSION MODULE

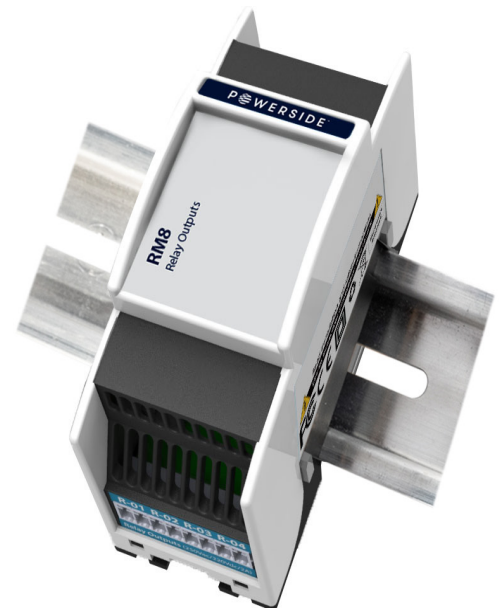
You can now turn your PQube 3 into a powerful controller, and command the shedding of loads to protect your main distribution circuit from tripping.

The RM8 extension relay module snaps easily to your PQube3 (also PQube 3e) and its 8 relays are programmable.

This allows you to customize your load shedding scheme, by assigning incremental thresholds, or by applying the scheme to protect up to 4 circuits.

*Note: RM8 module relay needs to be programmed using the PQube 3 configurator.

Part Number: [RM8-08R8-XXXX](#)



CB-1P - 1AMP SINGLE PHASE CIRCUIT BREAKER

Single-phase circuit breaker for protecting 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.

Order Part Number: CB-1P-277/480V-1A



CB-3P - 1AMP 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.

Order Part Number: CB-3P-277/480V-1A



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 (approximately 10.630 inches (270 mm long), as well as two end stops for locking the PQube modules in place.

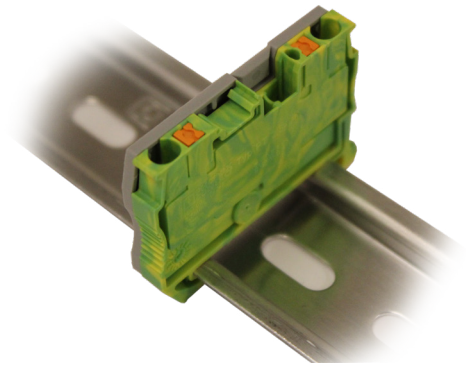
Order Part Number: DRK-270-00



SHIELD WIRE GROUNDING TERMINAL

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

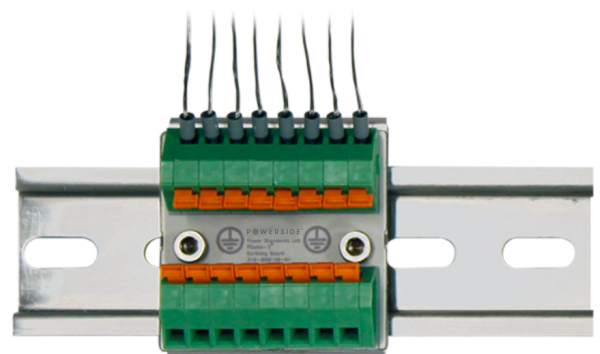
Order Part Number: TB-GND-6.2MM-XX



SHIELD WIRE GROUNDING BLOCK

Grounding block – individual terminals up to 16 shielded wires.

Order part number: SWG-16-00



DIN Rail Enclosure

IP65 DIN Rail Enclosure for PQube 3 and PQube Classic

If you want your PQube 3 or PQube Classic in its own enclosure, either because you don't have room in your electric panel or you want your PQube to be more visible and accessible, then mount it inside a standard DIN rail enclosure. It's your easiest and least expensive option.

Order Part Number: [ENCL-EXT-775-XX](#)

Order Part Number: [ENCL-EXT-1075-XX](#)

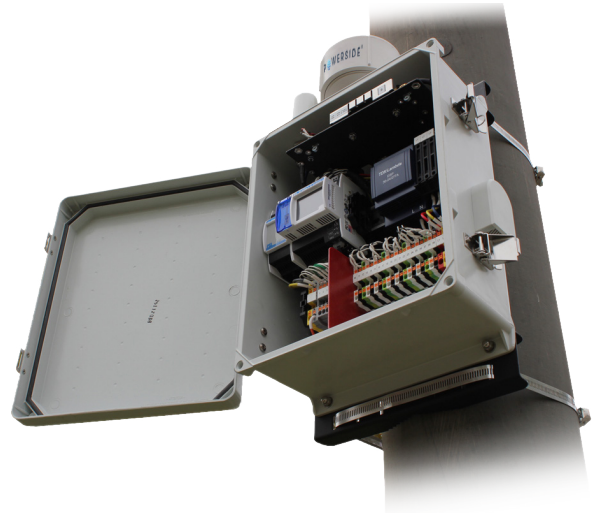
Order Part Number: [ENCL-EXT-10145-XX](#)



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 stainless steel 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 line.

- PQube 3 power analyzer, pre-packaged in an IP44 rated rugged polycarbonate indoor/outdoor enclosure with stainless steel pole-mount brackets and straps
- 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 – wide range with split-core CT(5 to 6000A) or flexible CT (3000A) Relay output, analog and digital inputs
- PQube 3 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:**

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

- **Modem ready model:**

Includes an internal modem mounting plate, mount two indoor/outdoor antennas on the enclosure, provide internal antenna and Ethernet cables, and provides 24Vdc for a modem (modem not included).

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

- **Modem+GPS sync ready model:**

Includes an integrated ultra-precise isolated GPS receiver (GPS1) and an time synchronization module(MS1). The GPS1 receiver is mounted on the enclosure.

Order Part Number: [PQ3iaB-Rugged-Pole-M24-GPS1-000-XXXX](#)



RUGGED WALL-MOUNT PACKAGE

When a rugged indoor or outdoor wall-mount installation is required, this product is perfect. The enclosure is IP44 rated, it's vented for warmer conditions, and you have a hinged window for viewing or accessing the PQube 3's full color touchscreen display. Quick-connect terminal blocks make wiring simple, and the cellular modem-ready option helps simplify data collection.

- 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 – wide range with split-core CT(5 to 6000A) or flexible CT (3000A)
- Relay output, analog and digital inputs
- PQube 3 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:**

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

- **Modem ready model:**

Includes an internal modem mounting plate, mount two indoor/outdoor antennas on the enclosure, provide internal antenna and Ethernet cables, and provides 24Vdc for a modem (modem not included).

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

- **Modem+GPS sync ready model:**

Includes an integrated ultra-precise isolated GPS receiver (GPS1) and an time synchronization module(MS1). The GPS1 receiver is mounted on the enclosure.

Order Part Number: [PQ3iaB-Rugged-Wall-M24-GPS1-000-XXXX](#)

POWERSIDE ULTRA-PRECISE CT SERIES

Powerside Ultra-Precise calibrated shielded split-core CT are specifically designed to meet demanding accuracy applications. This is accuracy on both current amplitude AND current angle accuracy.

The Powerside Ultra-Precise CT's exceed the most demand standard:
 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



POWERSIDE 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

Easy Installation – v connects directly to PQube 3 (integrator and external power not required)

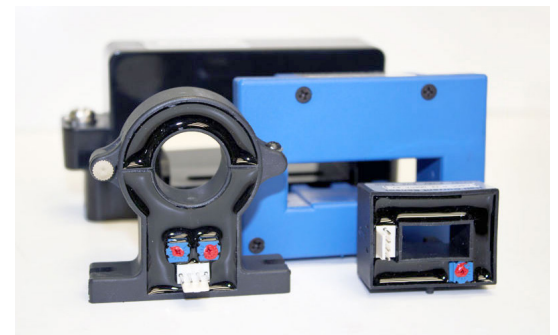
Measured Range : 0 to 3000A

Order part numbers: [FCT-24-3000A-XX](#)
 Order part numbers: [FCT-36-3000A-XX](#)
 Order part numbers: [FCT-48-3000A-XX](#)



DC HALL EFFECT CURRENT SENSORS

For use with [ATT2 – AC/DC Voltage/Current Module](#)



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)

Order Part Number: [ENV2-THPA-2M-xx](#)

Order Part Number: [ENV-CABLE-5M-XX](#)

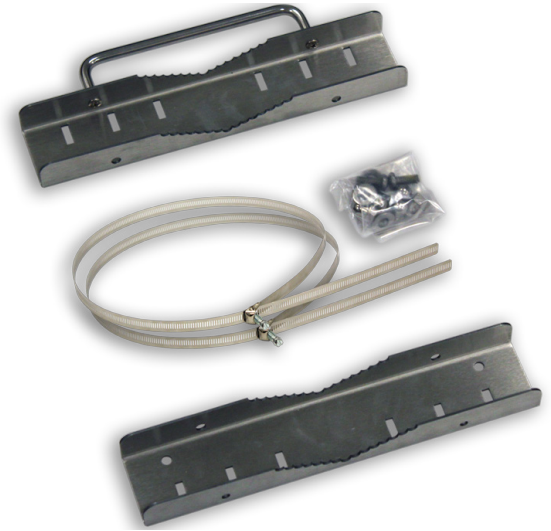
Order Part Number: [ENV2-EXT-CABLE-5M-xx](#)



POLE MOUNTING KIT FOR REMOTE ANTENNA BRACKET

Includes a special stainless-steel sharp-toothed adapter, and a stainless-steel strap for poles up to 14 inches (36 cm) diameter.

Order Part Number: [PMB-SS-00](#)



MAGNETIC MOUNTING KIT FOR REMOTE ANTENNA BRACKET

Use these six powerful Neodymium magnets to mount your Remote Antenna Bracket onto an electric panel enclosure, or any other indoor flat steel surface.

Order Part Number: [MAGKIT-RAB-00](#)



REMOTE ANTENNA BRACKET

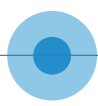
This clever anodized-aluminum bracket lets you mount your Precision GPS Receiver and your 4G Cell Modem antennas almost anywhere.

It comes with stainless-steel screws and washers for mounting to any wall.

Also included is a stainless-steel strap for poles from 2 to 3.5 inches (5 to 9 cm) diameter.

Note: Antennas and GPS receiver not included

Order Part Number: [RAB-00](#)



ANTENNA CABLES FOR RUGGED PACKAGES

Indoor and outdoor rated cables for remotely mounting your cellular antennas to the PQube 3 rugged packages.

Cell modem antenna cables

Typically two antennas/cables used per modem.

- N-N-style indoor/outdoor cable for outdoor N-style cell antenna. 3 meter long.

Order Part Number: [CABLE-N-N-03M-00](#)

- SMA to N-style indoor/outdoor cable for N-Style cell antenna. 6 meter long

Order Part Number: [CABLE-SMA-N-06M-00](#)



GPS RECEIVER CABLES FOR RUGGED PACKAGES

Indoor and outdoor rated cables for remotely mounting your GPS receiver to the PQube3 rugged packages

Note: the package must have the GPS synchronization option

Cables connecting GPS1 receiver to MS1 module:

Indoor rated 8-pin plug to RJ45 indoor cable. 10 meter long.

Order Part Number: [CABLE-MS1-10m-00](#)

Outdoor rated 8-pin plug to RJ45 outdoor cable. 7 meter long.

Order Part Number: [CABLE-8P-RJ45-07m-00](#)

Outdoor rated IP67-RJ45 to RJ45 cable. 4 meter long.

Order Part Number: [CABLE-IP67-RJ45-RJ45-04m-00](#)





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