Wiring

PowerShield8 comes with customised wiring, lengths cut and capped ready for a fast, high-quality installation.

PowerShield Link and Assure Software

Link and Assure provide the window and steering wheel for your PowerShield8 installations.

They provide a window into the health and performance of all your connected battery assets, highlighting which ones need attention. They both manage the controllers and record all battery readings from connected controllers in their database for viewing, trending, and reporting. This software provides proactive battery management tools that allow users to set limits and alarm parameters, create reports, and set various automations, such as for Thermal Runaway Protection.

Link is Windows and LAN-based, while Assure is web and hybrid cloud-based; however, they have the same functionality and are designed to work independently or together as required for each use case.
Ask which one is best for your application.

Key Features

- Real-time battery status
- Powerful activity log
- Individual discharge events in the detailed activity summary
- Point & click report generation.
- Trending – impedance, end of life, charge voltage, current, temperature, humidity
- Automated data management
- Intuitive and easy to learn/onboard.

With PowerShield8, you have everything required for battery warranty claims.

PowerShield Assure Plus

Suppose you have PowerShield8 installed and want extra assurance that your batteries will always be primed to perform while accelerating your team's progress towards battery management excellence. In that case, you should consider Assure Plus, our expert reporting and advice service. With Assure Plus, the PowerShield battery experts review your monthly battery data and recommend items requiring immediate action and next steps to improve overall battery management at each site.

(See the separate PowerShield Assure Brochure for more details.)

PowerShield 8
CRITICAL BATTERY PERFORMANCE

PRIMED
TO PERFORM

POWERSHIELD8 BATTERY MONITORING SYSTEM

CRITICAL FOR UPTIME

If Uptime and Downtime are two of your top KPIs and you rely on UPS systems with batteries, you need excellent battery monitoring. The larger your critical power facilities and the risk associated with downtime, the more you should consider PowerShield8. Maintaining critical power battery banks at peak health, primed to perform when needed, is one of the best investments you can make.
"Battery Monitoring Excellence" is a prerequisite to "Battery Management Excellence," which is the key to "Uptime Excellence', as batteries are the primary point of failure for UPS systems.

> PowerShield has spent over 25 years designing and installing battery monitoring systems in many of the world's largest critical power facilities.

PowerShield8 Battery Monitoring System

Designed to be modular, scalable, and flexible while helping your team achieve the highest IEEE/IEC battery management standards. The PowerShield8 system provides monitoring for an unlimited number of batteries, with hardware options suited to any sized critical power battery installation. A complete PowerShield8 battery monitoring system installation comprises data collection, data processing and presentation layers configured to suit each use case. The data collection layer includes mSensors on each battery and Hubs for each string of batteries. Controllers collate and analyse the data collected and send it to the desired presentation and user interface software, including PowerShield's Link &/or Assure Software.
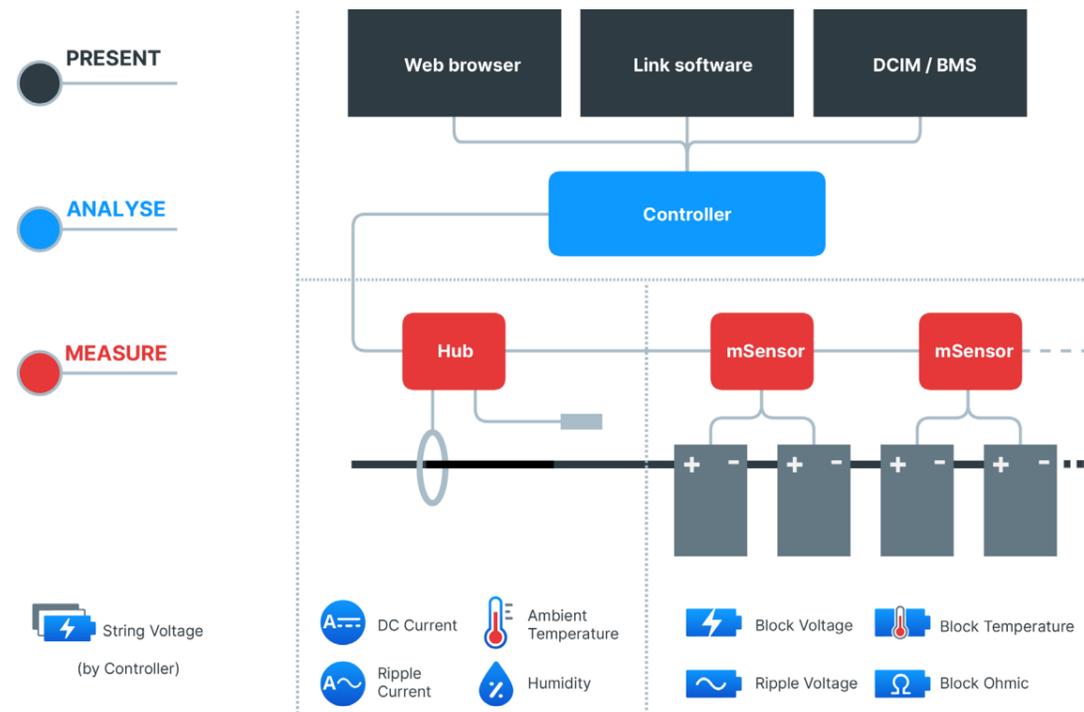
Each component has been designed and manufactured to meet the exacting standards found in critical power facilities and for ease of integration and data sharing with 3rd party devices and applications.

A complete PowerShield8 installation of hardware and software will ensure you get the information needed to conform to IEEC/IEC battery management guidelines.
(Refer to the PowerSheild8 Datasheet for technical details.)

PowerShield8 Controller

Controllers are smart devices that are the heart and the brain of the PowerShield8 battery monitoring system. They control data collection from the mSensors and Hubs and groom and store data ready for transfer to Link and Assure software, and anywhere else it may be needed. Controllers have sufficient onboard memory to capture the entire battery life of every connected battery.

Larger battery banks use the LX Controller and system, which can capture up to 8 strings and 512 blocks, and small to mid-sized battery banks use the MX Controller and system, which can monitor up to 4 strings and 200 blocks. Both systems use the same Hubs and mSensors to ensure installation and data collection consistency. The larger LX Controller can take more inputs and has more output and user interface options, including an LCD screen and control pad. Both Controller units are designed to fit into standard 19" computer racks.

PowerShield8 Hub

PowerShield8 Hubs streamline wiring for string-level sensors and transducers, collecting data and transferring it to controllers when instructed. Hubs enable the collection of current (DC and ripple) and environmental conditions such as ambient temperature and humidity as required for each string.

PowerShield8 mSensor

mSensors are smart devices with advanced circuits designed to drive fast, accurate battery data sampling. Quality data collection and management are one area that sets PowerShield8 apart, starting with mSensors.

Located at the battery, mSensors collect individual block voltage (DC and ripple), impedance (Ohmic value), and temperature. Battery temperature is measured at the negative terminal as per IEEE/IEC guidelines. mSensors are self-calibrating for accurate impedance measurement, and there is a mSensor model for each voltage and battery type.

Designed for use with batteries in racks or cabinets, mSensors come with pre-terminated harnesses, making them faster and quicker to install. 750cdV optical isolation inside the mSensor keeps dangerous voltages away for operators while ensuring battery data is passed through to the controller as required.