

# PDICore™

The PDICore is a smarter Power Data Interface that replaces the PDI in DS and AQS platforms. It adds new functionality such as input and output controls, a DC/DC converter and battery voltage monitor, all integrated into a smaller package. The system also includes a small backup battery that enables the system to safely shutdown in the event of power loss, preserving data.



## New functionality introduced with the PDICore includes:

**Remotely triggerable relay output** – users can now trigger external components like strobe lights, alarms, or Summa cannisters based on off measurement data, right from the Cloud platform.

**Analog inputs (2x) 0-5V or 4-20mA inputs** – user selectable analog inputs mean a wider variety of external sensors can be integrated without the need for an AUX module.

**Sleep mode** – the PDICore can be configured to 'sleep' the DS/AQS based on a schedule to maximize battery life for power-sensitive applications that don't require 24/7 monitoring.

**Remote module reset** – in the event a module has an error it can now be power cycled remotely. Users will no longer need to go to site to perform the simple task of turning something on and off.

**Safe shutdown backup battery** – in the event of power loss, the instrument will detect a low voltage input and automatically switch to a backup battery and initiate a safe shutdown, significantly decreasing the risk of data loss or corruption due to unplanned power outage.

**Internal temperature measurement** – additional diagnostic to keep your instrument running at peak efficiency.

**External temperature/humidity sensor input** – The PDICore is compatible with the Aeroqual PCXTRH external sensor for ambient T/RH measurement.

Functionality	PDI V1	PDICore™
On/off power switch	✓	✓
3rd party RS-232 sensor input	✓	✓
DC/DC converter	✓	✓
Battery voltage monitoring		✓
Relay output		✓
0-5V input		✓
4-20mA input		✓
External Temperature/RH sensor input		✓
Sleep mode		✓
Internal temperature sensor		✓
Remote module reset		✓
Safe shutdown		✓
0-5 V and 4-20 mA outputs		Coming soon
TTL and I2C inputs		Coming soon