PERFORMANCE UPDATE



POWERSCOUT TO POWERSCOUT HD MIGRATION GUIDE

SCOPE: This document defines key differences between the PowerScout 3037/PowerScout 24 and the updated PowerScout 12/48 HD meters. It is intended for current PowerScout users who are either replacing a PowerScout 3037/24 with a PowerScout 12/48 HD meter or working in an environment with both meter types. For questions outside the scope of this document, please refer to the PowerScout HD Manual or contact DENT Technical Support at support@dentinstruments.com / 541-388-4774.

INTRODUCTION: DENT Instruments has responded to the growing needs of the energy and building automation control markets by introducing the PowerScout HD (PSHD) series of networked power meters. The HD moniker reflects both "High Density" and "High Definition" by bringing more points into a single meter and increasing data fidelity. While the original PowerScout series and the new PSHD series share many of the same popular features such as being self-powered from line voltage, multi-protocol in all models, and ease of configuration there are some important distinctions of which integrators and end users need to be aware.

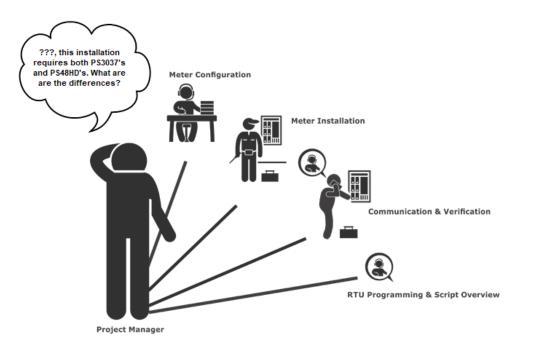
POWERSCOUT 3037/24 vs. POWERSCOUT HD: MAIN DIFFERENCES

- 1. The Modbus register and BACnet Objects schemes are different between the PowerScout 3037/24 and PSHD meters. The PSHD meters now report all data in floating point format which requires less manipulation (such as scaling) by the host RTU. Register organization has been improved by adopting the SunSpec three phase net metering model as a basis. The PSHD register/object list is available as an Excel® document (click here to download). The PowerScout 3037/24 and PSHD register space is non-overlapping so that both meter types can exist within the same network allowing for expansion with minimal disruption of existing scripts and programs. BACnet object types in PSHD have been updated to include all the Standard Objects in BACnet version 135-2016 including organization of elements through Structured View.
- 2. The Windows® configuration utility "ViewPoint HD" is not compatible with PowerScout 3037/24 and can only be used with PSHD meters. PowerScout 3037/24 devices must continue to use legacy ViewPoint 4 software. PSHD meters can utilize updated ViewPoint HD software, which includes new analysis and troubleshooting features such as waveform capture, phasor plotting, and harmonic analysis. The PSHD meter can also be configured via a smart phone or tablet via the meter's built in web server.
- 3. New capabilities (coming May 2018). The PowerScout HD Series has expanded upon the feature set of the PowerScout series by adding Alarms, Interval Data Recording, and Pulse Inputs. Along with new features comes new analytics such as THD, Theta, and installation diagnostics.

We have highlighted major differences between the product lines in a series of tables on the following pages. Please review this document, along with the <u>PowerScout HD Manual</u>, prior to working with or installing the meter.

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METER CONFIGURATION DIFFERENCES



PC (Desktop or Laptop)	~	~
Tablet, Smart Device (Web Page Based)		~
USB (Type AB Cable) or Ethernet	~	~
Display (Limited Configuration)		~
ViewPoint Software	~	
ViewPoint HD Software		~
Web Browser		~
Modbus or BACnet via 3rd Party Software	~	~

METER INSTALLATION DIFFERENCES



Direct Conduit Connection	~
High Voltage Cover (IP30)*	~

*High Voltage Cover not available on "board only" models of the PS12HD. Contact DENT Instruments for more information.



VERIFICATION & COMMUNICATION DIFFERENCES



PC Laptop	~	~
Tablet, Smart Device (Web Page Based)		~
USB (Type AB Cable), RS-485, or Ethernet	~	~
ViewPoint Software	~	
ViewPoint HD Software		~
Web Browser		~

RTU PROGRAMMING & SCRIPTING DIFFERENCES



Unsigned, Fixed-Point Modbus Registers	~	
Signed, Floating-Point Modbus Registers		~
SunSpec Model Modbus Registers		~
THD & Theta		~

RESOURCES

Please review all documentation prior to working with or installing the PowerScout HD. For technical support, please contact us at <u>support@dentinstruments.com</u>.

- PowerScout HD Manual
- PowerScout HD Register list (Excel®)