

"Electrical Sub-metering"

Comparison of Measurlogic DTS 307 power meters with the Veris E5x Series of power meters

Presentation

by

Measurlogic Inc.

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Outline

- Who Measurlogic Inc. are and what we do.
- DTS 307 Power/Energy sub-meter Comparison of key features with the Veris E5x series of Power/Energy sub-meters



**DTS
SERIES**

Overview

- Based in **Centennial, Colorado** - where the **DTS product family of AC and DC electrical sub-meters** are manufactured and supported.
- **Complies with “Buy American Requirement”** of the American Recovery & Reinvestment Act (ARRA).
- Have been in the US market for **over 20 years**

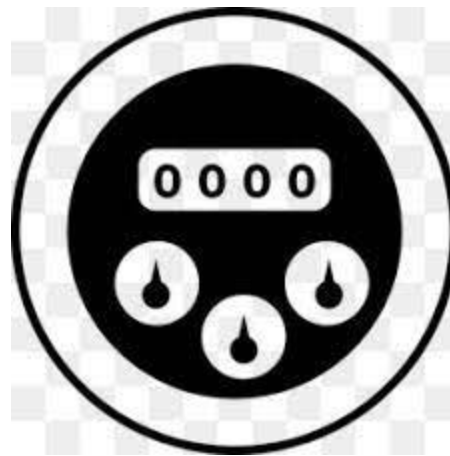
**DTS
SERIES**



www.measurlogic.com

What is a Sub-meter

A “SUB-METER” is any measuring device deployed inside a facility (after the main utility meter) to provide data from one or more measuring points.



Unique features of the DTS meter

➤ Auto-Topology detection

- Default is **ON**
- Detects service connection automatically

➤ CT reversal algorithm

- All DTS meters are designed as 4 Quadrant meters (consumed and generated measurements)
- 95% of applications are just consumption loads
- DTS meters are therefore set to **2 Quadrant as default**
- Benefit is that an incorrectly oriented CT is reversed automatically

Unique features of the DTS meter

➤ 333mV CT input

- 333mV CT meters are also Rogowski CT compatible (**NO Integrator required**)
- **Field selectable** either via DIP switches or through the RS-485 / Ethernet communications interface depending on meter model.
- Our DTS meters **can interface with all competitor's Rogowski CTs**

➤ Communications Protocols

- Both Modbus and BACnet protocols are loaded into **ALL** DTS meters
- Field selectable (Modbus is the default – BACnet on request)
- For RS485 Serial meters – user can select one or the other
- For Ethernet meters – Modbus TCP **and** BACnet/IP can be used concurrently.

DTS 307 AC sub-meter

- Revenue Grade 3 Phase Energy / Power Sub-meter
- **Ultra compact** – Only 1.38" wide & 3.11" high
- Cost-effective
- Din rail mounting
- Pluggable terminals makes for easy install and replacement, if necessary
- Communications interface – **Ethernet or Serial**
- Communications protocol – BACnet & Modbus
- **Made in America**



DTS 307 Comparison

➤ DTS 307 – RS-485 Feature Comparison with VERIS E5X Series



FEATURES	DTS 307-SB	E50B1	E50C2	E50H2	E50C2A	E50H2A	E51C2	E51H2	E51C2A	E51H2A
333mV CT Inputs	✓	✓	✓	✓			✓	✓		
Rogowski CT Inputs	✓				✓	✓			✓	✓
RS-485 - Modbus RTU Communications	✓		✓		✓		✓		✓	
RS-485 - BACnet MS/TP Communications	✓			✓		✓		✓		✓
2 Quadrant (Consumption loads ONLY)	✓	✓	✓	✓	✓	✓				
4 Quadrant (Net Metering)	✓						✓	✓	✓	✓
Pulse (kWh) Output	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pluggable Terminals	✓									
Cost	\$	\$\$	\$\$	\$\$\$	\$\$	\$\$\$	\$\$\$	\$\$\$\$	\$\$\$	\$\$\$\$

DTS 307 – E5x Comparison

RS-485 Models



1 SKU



9 SKUs

DTS 307-34-SB-P-N

**E50B1 E50C2
E50H2 E50C2A
E50H2A E51C2
E51H2 E51C2A
E51H2A**

DTS 307 – E5x Comparison

Ethernet Models



1 SKU

=

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DTS 307-34-EB-P-N

DTS Family of AC sub-meters

AC sub-metering solutions (Single 3 Phase circuit solutions)

[DTS 307](#)

Ultra compact DIN rail 3 phase meter with Ethernet or RS-485 communications

[DTS 310](#)

Compact DIN rail meter with RS-485 or Ethernet communications and digital I/O

[DTS 305](#)

Flexible DIN rail meter with analog & digital I/O and optional remote display

[DTS SMX](#)

Weatherproof, surface mounting meter with integral display

[DTS SKTD](#)

Socket meter with various form factors and communications options



DTS Family of AC sub-meters

AC Multi-Circuit sub-metering solutions

DTS MCM

9, 12, 18 or 24 Channel options



Choose a Current Transformer (CT)

- 333mV output Split core CTs from 25A to 5000A
- Rogowski Flexible CTs from 1000A to 5000A
- Can supply 5A secondary split core CTs if required

Split Core CTs

Split core with 333mV or 5A output

Rogowski CTs

Flexible Rogowski Coils with apertures from 4" to 12"
up to 1000A with 4" and 6" diameter CTs (350mV/1kA)
up to 2500A with 6" and 8" diameter CTs (140mV/1kA)
up to 5000A with 8" and 12" diameter CTs (70mV/1kA)



DTS Accessories

Accessories / Options for DTS AC energy meters

Fuse Kits

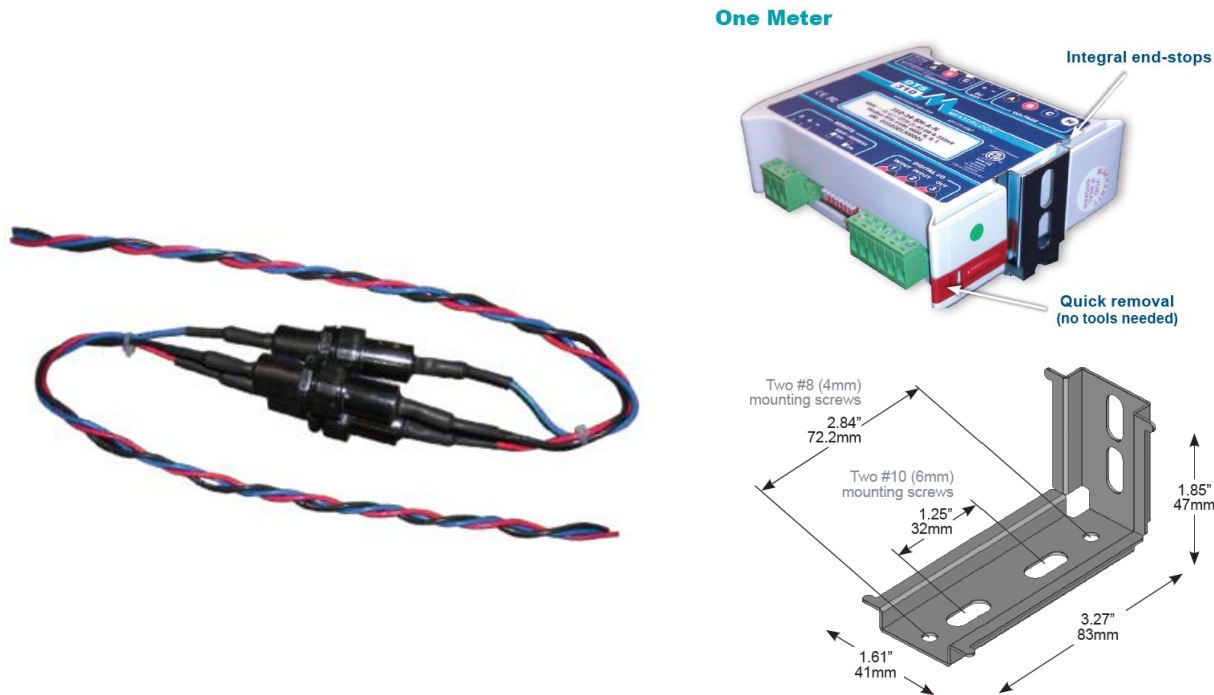
In-line 600Vac fuse kits, single or 3 phase

90° Bracket

Right angle DIN rail style mounting bracket for up to 2 x DTS 307 / 310 meters

Converters

Modbus / BACnet Wi-Fi / Ethernet / Serial Gateway



Contact Details

Toll-free	+1 877-777-6567
Telephone	+1 303-805-5252
e-mail	sales@measurlogic.com
Website	www.measurlogic.com
Mailing Address	<u>7268 S. Tucson Way</u> <u>Centennial, CO 80112</u>