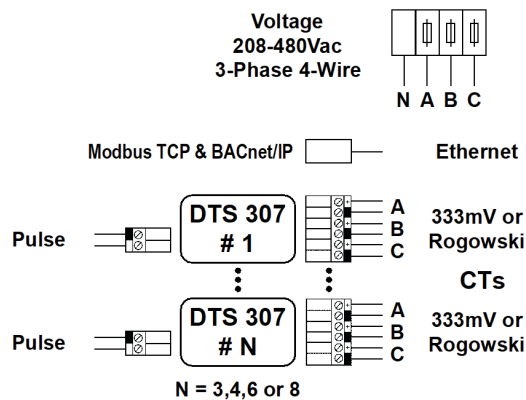


FEATURES

- Revenue Grade Submeter - ANSI C12.20
- 9, 12, 18 or 24 Current Circuits (3, 4, 6 or 8 x 3 phase loads)
- Based on the DTS 307 ultra-compact energy meter
- 333mV or Rogowski CTs (Software Selectable)
- 208V - 480Vac L-L Three Phase Voltage input
- Pre-wired Voltage and Communications
- Internal easy to mount DIN rail
- Line powered or low voltage 12-24Vdc / 24Vac
- Ethernet connectivity - Modbus TCP or BACnet / IP
- Wall Mounting, non-metallic, lockable weatherproof enclosure kits
- Abundant space for easy wiring
- 1 x kWh Energy pulse output per DTS 307
- kWh (Active Energy) Counter Display option
- Bi-directional for renewable systems (NET metering)
- UL Listed, CE, FCC Part 15 Class B
- BTL Listed
- Made in America



CONNECTION OVERVIEW



MEASUREMENT PARAMETERS*

Measurement Topologies

3 Phase, 3 and 4-wire	✓
Single Phase 2 and 3-wire (120/208 & 120/240V)	✓

Measurements

AC Volts (phase-phase)	L1, L2, L3 & III
AC Volts (phase-neutral)	L1, L2, L3 & III
AC Current	L1, L2, L3 & III
Neutral Current (calculated)	✓
Frequency (Hz)	✓

Power

Active Power - kW (consumed/generated)	L1, L2, L3 & III
Reactive Power - kVAR (inductive/capacitive)	L1, L2, L3 & III
Apparent Power - kVA	L1, L2, L3 & III
Power Factor	L1, L2, L3 & III
Phase Angle	L1, L2, L3 & III
Bi-directional for renewable systems	✓

Demand

kW - Sliding Window	✓
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Energy

Active Energy - kWh (Net)	L1, L2, L3 & III
Active Energy - kWh (consumed/generated)	III
Reactive Energy - kVARh (Net)	L1, L2, L3 & III
Reactive Energy - kVARh (inductive/capacitive)	III

Setpoints, Alarms, Control

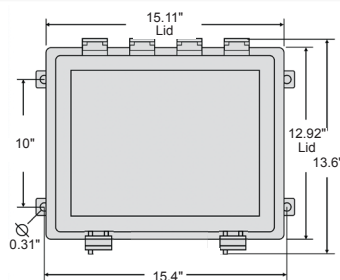
Pulse / Status Output	1
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Communications

Modbus TCP	✓
BACnet / IP	✓

DIMENSIONS (ENCLOSURE)

* Drawings are for illustrative purposes only
Technical details subject to change



SPECIFICATIONS*

Measuring Circuits

Voltage range:	208-480Vac, L-L
Voltage overload:	1.1 x
Voltage burden:	<0.1 VA @ 277 Vac L-N
Frequency:	45 to 65 Hz
Rated current:	333mV
Current overload:	1.2 x
Power overload:	1.1 x
# of Circuits	9, 12, 18, or 24

Accuracy

Voltage:	0.5%, <0.2% typical (80-120%)
Current:	0.5%, <0.2% typical (10-120%)
Power:	0.5%, <0.2% typical (10-120%)
Power Factor:	0.5% (between 0.5 and 1.0)
Energy:**	Class 0.2 (ANSI C12.20)

Voltage Supply (Self-Powered)

Voltage:	Powered from Phase A & Neutral
Frequency:	50/60 Hz
Burden:	<2VA per DTS 307

Low Voltage AC/DC Auxiliary (Option)

Voltage options:	12-24Vdc or 24Vac
Tolerance:	+/- 10%
Burden:	<2VA per DTS 307
Isolation:	Must be powered from a Class 2 IEC 60950 isolated power supply

Mechanical

Connection:	Pluggable screw terminals suitable for 12AWG stranded wire (2.5mm ²)
Enclosure Material:	Polycarbonate
Protection:	Nema 4x (IP 66/67)
Dimensions:	15.1" (H) x 13.34" (W) x 9.37" (D)

Environmental

Operating temp:	-31° to 158°F (-35° to 70°C)
Storage temp:	-40° to 185°F (-40° to 85°C)
Humidity:	5 to 95% R.H. non-condensing

Communications (Ethernet)

Connection:	RJ45, 10/100 Base T
Protocols:	Modbus TCP (SunSpec Certified) or BACnet / IP (BTL Listed)

Pulse Output

Type:	Potential Free, N.O. Solid State Relay
Pulse Width:	Max 10 Pulses per Second
Pulse Rate:	1 Pulse / 1 kWh default, user configurable
Max On-Resistance:	30 ohm
Max Switching Voltage:	50Vdc or 30Vac
Max Switching Current:	120mA (350mA for 10mS)
Connection:	Isolated Pin-Pair

Standards & Safety

UL Listing:	E488290
Conforms to:	UL Std 61010.1 3rd Edition, May 11, 2012, Revised July 15, 2015
Certified to:	CAN/CSA C22.2 # 61010.1, 3rd Edition, Revised July 15, 2015
Additional Standards:	IEC 61010-2-030: 2010, 1st Edition
EMC:	IEC 61326-1 (2012) Ed2 IEC 61000-3-2, IEC 61000-3-3, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6, IEC 61000-4-8, IEC 61000-4-11
Emissions:	CISPR 11 Group1 Class B / FCC Part 15 Class B
Other:	Measurement Category III – 300Vac L-N / 520Vac L-L PD2
Communications:	BTL Listed. SunSpec Alliance certified
RoHS:	Compliant

MODEL NUMBER BUILDER*

DTS MCM - [a b] - [c] - [d] C

Communications

a: E = Ethernet
b: B = Modbus TCP & BACnet / IP

Powering Options

C: N = Self-Powered Va-N, 120 – 305 Vac
A = External 12-24Vdc or 24Vac

Current Circuits

d: 9 = 9 circuits (3 x 3 phase)
12 = 12 circuits (4 x 3 phase)
18 = 18 circuits (6 x 3 phase)
24 = 24 circuits (8 x 3 phase)

ORDERING EXAMPLES

Part Number (Meter)	Current		# of Circuits	Voltage	Communications	kWh Outputs	Powering
DTS MCM-EB-N-9C	333mV or Flexible Rogowski CTs (software selectable)		9 (3 x 3ph)	208V-480V 3 ph 4 wire	Ethernet: Modbus and BACnet	3	Self-powered (Va-N)
DTS MCM-EB-N-12C			12 (4 x 3ph)			4	
DTS MCM-EB-N-18C			18 (6 x 3ph)			6	
DTS MCM-EB-N-24C			24 (8 x 3ph)			8	
DTS MCM-EB-A-9C	333mV or Flexible Rogowski CTs (software selectable)		9 (3 x 3ph)	208V-480V 3 ph 3/ 4 wire	Ethernet: Modbus and BACnet	3	12-24Vdc or 24Vac
DTS MCM-EB-A-12C			12 (4 x 3ph)			4	
DTS MCM-EB-A-18C			18 (6 x 3ph)			6	
DTS MCM-EB-A-24C			24 (8 x 3ph)			8	
Part Number (Enclosure)	Dimensions	Max. # of Circuits	Voltage Inputs		Current Inputs	Features	
MKTENCL-094	12" x 10" x 6" Enclosure	9 or 12 Circuits	3 phase Voltage terminals and Neutral terminal		6 way pluggable screw terminals	Surface Mounting Weatherproof Non-Metallic Lockable	
MKTENCL-096			3 phase Voltage circuit breaker and Neutral terminal				
MKTENCL-090	14" x 12" x 7" Enclosure	9,12, 18 or 24 Circuits	3 phase Voltage terminals and Neutral terminal				
MKTENCL-092			3 phase Voltage circuit breaker and Neutral terminal				

**CURRENT
TRANSFORMER
COMPATIBILITY**



Split Core CTs
measurlogic.com/102



Rogowski CTs
measurlogic.com/106

Distributor:

R25A

MEASURLOGIC

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