

Ideal for Renewables!



# DTS SKT & SKTD

## Socket Energy Sub-Meter with Remote Communications

Multiple Form Factors



**DTS SKT**



**DTS SKTD**  
with Integral Display Unit

- Large backlit LCD display
- Displays up to 24 variables with 3 variables per page
- Auto scroll through 8 pages

### FEATURES

- “Smart” submeter replacement for existing electro-mechanical meters
- Class 0.5 Energy Meter\*\* (ANSI C12.20) - “Revenue grade”
- Bi-directional for renewable systems (NET metering)
- Socket Form Factors
  - ♦ 1S, 2S, 3S, 4S, 5S, 6S, 8S, 9S, 12S, 14S, 15S, 16S
  - ♦ other form factors available
- **Embedded Ethernet connectivity** - Modbus/TCP, BACnet/IP, SNMP or DNP 3.00
- RS-485 connectivity - Modbus RTU or BACnet MS/TP
- LonWorks FT-10 communications
- Digital output (N.O. solid state relay) – optional
- Integral 3-line LCD display (DTS SKTD)
- User configurable using DTS Config software
- User-definable Modbus register area
- Compatible with **PowerStudio™** Energy Management Software
- Integrates seamlessly with AcquiSuite data acquisition server
- **SunSpec Alliance** compatible
- **Designed and Manufactured in the USA.** Complies with the Buy American Provisions of ARRA Section 1605

### MEASUREMENT PARAMETERS\*

	DTS SKT / SKTD
<b>Socket Form Factors</b>	
1S, 2S, 3S, 4S, 5S, 6S, 8S, 9S, 12S, 14S, 15S, 16S	✓
other form factors available	✓
<b>Measurements</b>	
AC Volts (phase-phase)	L1, L2, L3 & III
AC Volts (phase-neutral)	L1, L2, L3 & III
AC Current	L1, L2, L3 & III
Neutral Current	✓
Frequency (Hz)	L1, L2, L3 & III
<b>Power</b>	
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	✓
<b>Demand</b>	
kW - Sliding Window	L1, L2, L3 & III
<b>Energy</b>	
Active Energy - kWh (consumed/generated)	L1, L2, L3 & III
Reactive Energy - kVArh (inductive/capacitive)	L1, L2, L3 & III
<b>Setpoints, Alarms, Control</b>	
Pulse / Status Outputs	1
<b>Communications</b>	
Modbus RTU	✓
Modbus TCP	✓
BACnet MS/TP	✓
BACnet / IP	✓
SNMP	✓
DNP 3.00 over IP	✓
LonWorks FT-10	✓
<b>Other Properties</b>	
Integral LCD Display	DTS SKTD

\* Model dependent

Call Toll Free: 1-877-PQ-SOLNS (1-877-777-6567) or 303-805-5252 email: [info@measurlogic.com](mailto:info@measurlogic.com)

**MEASURLOGIC**

[www.measurlogic.com](http://www.measurlogic.com)

## SPECIFICATIONS\*

### Measuring Circuits:

Nominal Voltage: depending on form factor and model, range is -10% to +10%  
 Permanent overload: 1.1 x nominal voltage  
 Voltage burden: <0.1 VA @ 280 V ac L-N  
 Frequency: 45 to 65 Hz  
 Rated current: depending on form factor and model  
 Permanent overload: 1.5 x I<sub>n</sub> for 5A version  
 Current input burden: 0.5 VA @ 5 A

### 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 0.5 (ANSI C12.20)

### Mechanical characteristics:

Connection: Socket base  
 Case Material: Self-extinguishable, V0 plastic  
 Protection: NEMA 4  
 Dimensions: 7"(178mm)Ø x 7.48"(190mm)Depth  
 Weight: 2.13 lbs (950g) DTS-SKT  
 2.31 lbs (1050g) DTS-SKTD

### Communications: (Serial)

Connection: 3 way pluggable, screw terminal  
 Protocols: Modbus RTU or BACnet MS/TP

### Communications: (LonWorks)

Connection: 2 way pluggable, screw terminal  
 Protocols: LonWorks FT-10

### Communications: (Ethernet)

Connection: RJ45, 10/100Base-T  
 Protocols: Modbus TCP or BACnet/IP or SNMP or DNP 3.00 over IP

### Environmental:

**DTS-SKT:**  
 Operating temp: -4° to 131°F (-20° to 55°C)  
 Storage temp: -40° to 185°F (-40° to 85°C)  
 Humidity: 5 to 95% R.H. non-condensing

### DTS-SKTD:

Operating temp: -4° to 131°F (-20° to 55°C)  
 Storage temp: -22° to 176°F (-30° to 80°C)  
 Humidity: 5 to 75% R.H. non-condensing

### Display: (DTS SKTD) \*

Resolution: 128 x 64 pixels  
 # of pages: 8  
 Parameters/page: 3 (user-definable)  
 Auto scroll: 5 seconds

### Pulse / Status Output: - Optional

Type: Potential Free, N.O. Solid State Relay  
 Pulse Width: 100 mS default  
 Min 50 mS, User configurable up to 10 Seconds  
 Max 10 Pulses per Second  
 Pulse Rate: 1 Pulse / 1 kWh default, User configurable  
 Max On-Resistance: 30 ohm  
 Max Switching Voltage: 240Vac  
 Max Switching Current: 120mA (350mA for 10mS)

### Standards & Safety:

Safety: IEC 61010 Pending  
 EMC: 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  
 FCC: CISPR 11 class A  
 Other: IEC60688  
 Category III – 280Vac / 485Vac

## MODEL NUMBER BUILDER\*

**DTS SKTD** -

**a b**

**c d**

**e**

**f**

**g**

D = display

### Current & Voltage Inputs

**a:** 1 = 1A  
 5 = 5A  
 9 = unburdened CT

**b:** 1 = 120Vac L-N  
 2 = 208-240Vac L-L  
 4 = 120-480Vac L-L

### Communications

**c:** S = Serial  
 E = Ethernet  
 N = None

**d:** M = Modbus  
 B = BACnet  
 L = LonWorks  
 S = SNMP  
 D = DNP 3.0  
 N = None

### I/O

**e:** N = Not fitted  
 P = 1 x Digital output (PhotoMos relay)

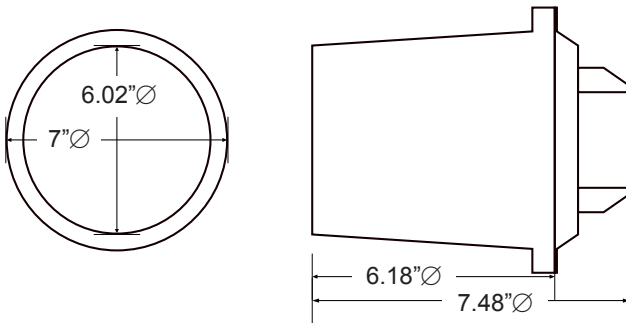
### Socket Form Factor

**f:** 1S, 2S, 3S,  
 4S, 5S, 6S,  
 8S, 9S, 12S,  
 14S, 15S, 16S  
 (others on request)

### Current Rating

**g:** Socket Current Rating  
 (100A, 200A)  
 = "Blank" if external CTs

## DIMENSIONS



Distributor:

Call Toll Free: 877-PQ-SOLNS (877-777-6567)

Fax (425) 799-4780

email: [info@measurlogic.com](mailto:info@measurlogic.com)

\* Model dependent \*\* CTs excluded  
 Technical details subject to change