

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
Socket Form Factors	
1S, 2S, 3S, 4S, 5S, 6S, 8S, 9S, 12S, 14S, 15S, 16S	✓
other form factors available	✓
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	✓
Frequency (Hz)	L1, L2, L3 & III
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	L1, L2, L3 & III
Energy	
Active Energy - kWh (consumed/generated)	L1, L2, L3 & III
Reactive Energy - kVArh (inductive/capacitive)	L1, L2, L3 & III
Setpoints, Alarms, Control	
Pulse / Status Outputs	1
Communications	
Modbus RTU	✓
Modbus TCP	✓
BACnet MS/TP	✓
BACnet / IP	✓
SNMP	✓
DNP 3.00 over IP	✓
LonWorks FT-10	✓
Other Properties	
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

MEASURLOGIC

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_n 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)

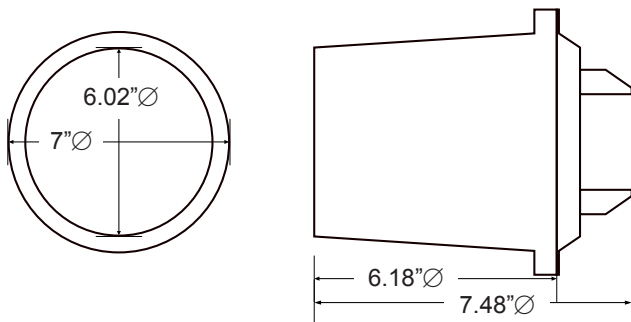
Socket Form Factor

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

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