



# SMART CONNECTDER™

Plug-&-Play integration for residential Distributed Energy Resources

The Smart ConnectDER™ is a meter collar for rapid connection of grid-ready energy assets.

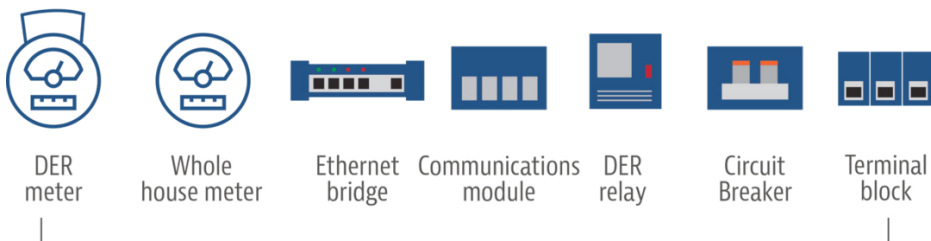
It is a UL listed, NEC compliant, low-cost alternative to traditional wiring methods.

Onboard metering, communications & controls unlock alternate tariff models and grid management capabilities.

- BENEFITS**
- Drives down wiring costs, logistics headaches, & site inspection time
  - Decreases BoS costs by eliminating components and reducing need for premises wiring upgrades
  - Integrated circuit breaker provides PV equipment protection & safe field connection to terminal block
  - Traditional below-the-meter connection option
  - supports net metering, direct utility grid connection (above-the-meter) option enables alternate PV asset ownership models
  - Onboard revenue grade telemetry & communications track system production
  - Track mixed model inverter fleet operations through ConnectDER Cloud™ (GUI or API)

- TECH. INFO**
- Supports solar PV installations up to 15kW AC
  - Grounding and bonding compliant with NEC Article 250
  - For use with grid-interactive PV systems with UL 1741-compliant string- or micro-inverters

## What's inside a Smart ConnectDER™?



## MECHANICAL SPECIFICATIONS +

ENCLOSURE RATING	NEMA 3R
ENCLOSURE TYPE	Injection molded polycarbonate, UL 94 V0 flame rating
COOLING	Natural convection
DIMENSIONS (H X W X D)	6.7 x 6.7 x 5.25in (170 x 170 x 133mm) collar only 8.5 x 6.7 x 5.25in (246 x 170 x 133mm) with junction box
WEIGHT	4lb (1.8kg)
SHIPPING WEIGHT	5.5lb (2.5kg)
MOUNTING SYSTEM	Blade interface with 4-jaw or 5-jaw meter socket
ELECTRIC METER COMPATIBILITY	Type 2S, 12S
METER SOCKET COMPATIBILITY	Ringless and ring-type meter sockets
CIRCUIT INTERFACE POINT	Below-the-meter or above-the-meter circuit interface (factory configured)
CONDUIT CONNECTIONS	Groove provided for ½", ¾", or 1" trade size opening

## SAFETY INFORMATION +

APPLICABLE SAFETY STANDARD	UL2745: Meter Socket Communications Equipment
FILE NUMBER	E468258



## UTILITY INTERACTIVE SOURCE RATINGS +

MAXIMUM POWER	15000 W
MAXIMUM VOLTAGE	240 V
MAXIMUM CONTINUOUS PV CURRENT	64 A
CONTINUOUS COMBINED CURRENT, PV/GRID	160 A
INVERTER WIRING TERMINATION	Box lugs, maximum wire size 3AWG
GRID CONNECTION TYPE	Split-Ø/3W (2S/4-jaw), 1 Ø/3W (12S/5-jaw)
GRID WIRING TERMINATION	Blade interface with meter socket for L1/L2, pigtail for neutral, optional 5th stab

## OVERCURRENT PROTECTION +

TYPE	Eaton BR, 120/240V, externally resettable
OVERCURRENT RATINGS AVAILABLE	15-45A in 5A increments, 50A-80A in 10A increments
CURRENT INTERRUPTING RATING	10k AIC rating

## ENVIRONMENTAL +

AMBIENT AIR OPERATING TEMPERATURE RANGE	-22°F to 158°F (-30°C to 70°C)
AMBIENT AIR STORAGE TEMPERATURE RANGE	-40°F to 176°F (-40°C to 80°C)



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## METERING SPECIFICATIONS (+)

FORM	2S, 12S
CLASS	100
ACCURACY	0.5%
FREQUENCY	60Hz +-5%
BURDEN	<3W
STANDARDS	ANSI C12.1, ANSI C12.20, UL Subject 2745
OPERATIONAL TEMP RANGE	-40°F to 185°F (-40°C to 85°C)t
HUMIDITY	0% to 100% (non-condensing)

## INTERFACES (+)

LCD	Watt hours and status
TERMINAL CONNECTIONS	Up to 3AWG wire

## CELLULAR SPECIFICATIONS (+)

### LTE CAT 3

DATA RATE	100.0D/50/0U Mbps
LTE BANDS	B17 (700), B5 (850), B4 (1700), B2 (1900)

### LTE CAT 1

DATA RATE	10.0D/5U Mbps
FREQUENCY BANDS (VERIZON)	LTE Bands B2 (1900), B4 (AWS1700), B13 (700)
FREQUENCY BANDS (AT&T)	LTE Bands B12/B13 (700), B4 (AWS1700), B2 (1900)
OUTPUT POWER	Class 3 (.2W, 23dBm)@LTE

## WARRANTY (+)

STANDARD WARRANTY	10 years
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The ConnectDER is one of these potential “game-changers” that has really caught my attention. ...the main distribution panels in the home are notoriously small, outdated, maxed out, recessed into the wall, not listed for a supply-side interconnection or a combination of the above – making interconnection costly and complex. Utilizing the ConnectDER however can greatly simplify the process – bypassing the existing distribution panel all together and tying directly in at the meter in both a code-compliant and utility-sanctioned manner.

*-15 year veteran solar installer*



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