

**EVlink™ Electric Vehicle Charging Stations**



**Indoor Wall-Mount**  
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**Outdoor Pedestal (Dual Unit)**  
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**New!** **EVlink™ Electric Vehicle Charging Solutions**

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**Wiser™ Energy Efficiency Solutions**



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**Residential Solar Power Solutions**



**Conext™ Grid Tie Inverter** (p. 29-9)

### EVlink™ Electric Vehicle Charging Stations

Our Electric Vehicle Supply Equipment (EVSE) provides power to recharge the on-board vehicle batteries in Electric Vehicles (EV) and Plug-in Hybrid Electric Vehicles (PHEV). The EVSE units are Level 2 type which can charge the vehicle batteries in as little as 3-6 hours, depending on the vehicle type and level of battery charge. The EVSE will typically be fed from a 208 V or 240 V source, two-pole 40 A circuit breaker or disconnect and will be able to provide 30 A of current to the vehicle's on-board charger. All units meet or exceed SAE J1772▲ and UL standards for electric vehicle supply equipment.

#### Schneider Electric EVSE features include:

- Integral Ground Fault Protection at 5 mA
- User friendly interface to indicate power on/off, charging, system detected faults etc.
- Heavy duty cord and connector which meet SAE J1772 standards
- Automatic reset and restart after ground fault or main power loss
- Radio Frequency Identification (RFID) authentication available for outdoor units■
- Available in indoor/outdoor, wall and pedestal mount, single and dual charger models
- Optional advanced metering functionality available to collect and monitor energy and demand profile data♦



EV2430WS



EV230WSR



EV230PSRR



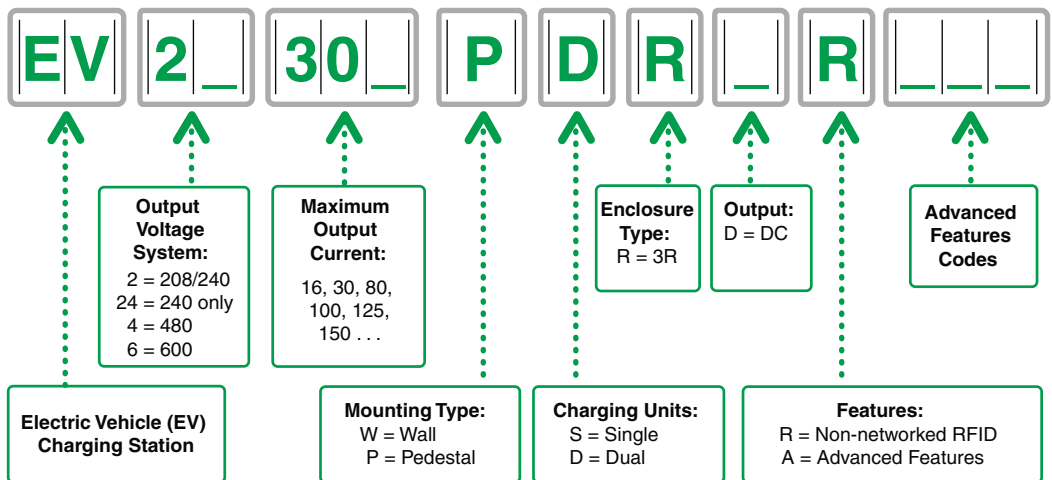
EV230PDRR



#### Coming in 2012:

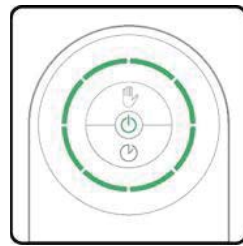
- Charging Station with advanced communications and networking
- DC fast charging station which can charge 80% of EV in less than 30 minutes

Please stay tuned at [www.schneider-electric.us/go/evlink](http://www.schneider-electric.us/go/evlink)



▲ SAE J1772—standard for Electric Vehicles that defines common connectors and interfaces at various power levels for PHEV and EV established by Society of Automotive Engineers for North America.  
■ RFID—localized RFID in which the programming for the addition or removal of subscribers is done at the EVSE location.  
♦ Energy monitoring and metering options are available and can be added to provide networking and communication through an optional power meter enclosure. Please consult your local Schneider Electric sales representative for selection information or call 1-888-778-2733.

**Indoor Charging Stations (Residential Applications)**

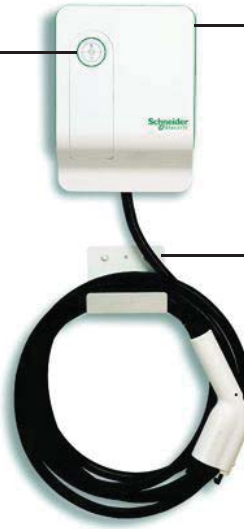


**Interface:**

- Segmented charge and delay charge progress indicator
- Stop Button and indicator
- Power status and system detected fault indicator
- Delay button and indicator

**Protection:**

- Integral Ground Fault Protection at 5 mA
- Ground fault function tested before each charge cycle begins
- Auto restart after ground fault or main power loss



**Enclosure:**

- Non-metallic
- Indoor wall-mount (stud, drywall, or masonry wall)

**Cable Holder:**

- Supports and helps organize the cable
- Mounted independently from the enclosure

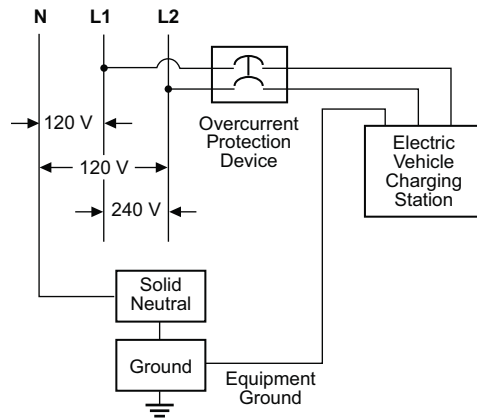
**Connector and Cord:**

- Complies with SAE J1772
- Cable length: 18 ft. (5.5 m)

**Table 29.1: Indoor Charging Station—Wall-mounted**

Output Voltage System	Output Current	Mounting	Enclosure Type	Number of Charging Units	Catalog Number	\$ Price
240 Vac only	30 A	Wall	1	1	<a href="#">EV2430WS</a>	1200.00

**120/240 Vac Only**



Outdoor Charging Stations

Protection:

- Integral Ground Fault Protection at 5 mA
- Ground fault function tested before each charge cycle begins
- Auto restart after ground fault or main power loss

Authentication:

- Localized RFID solution (optional)

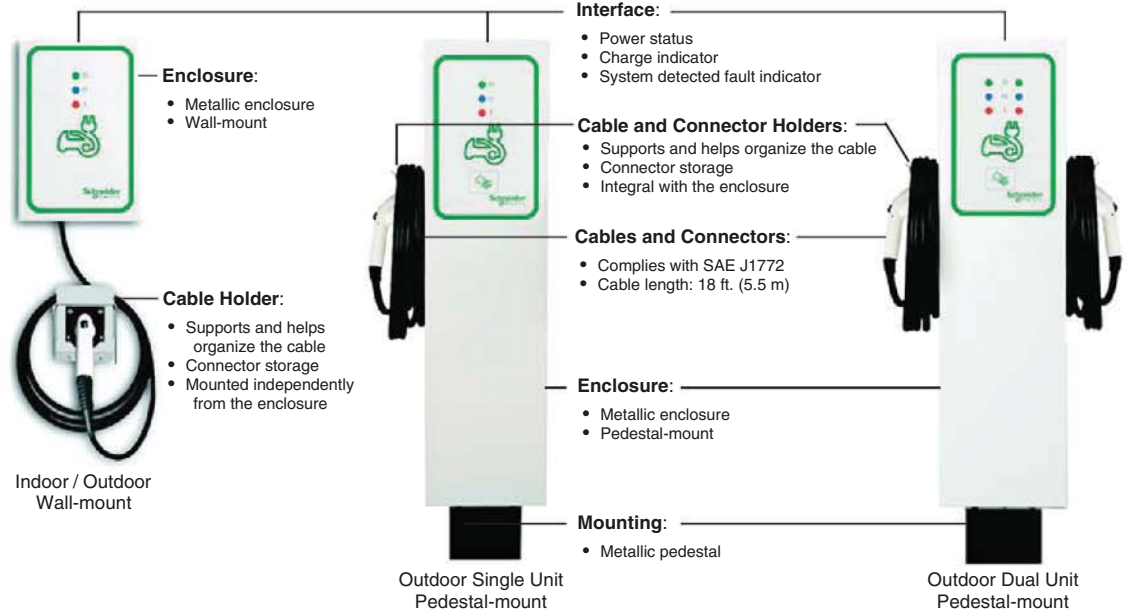


Table 29.2: Outdoor Charging Stations

Output Voltage System	Application	Output Current	Mounting	Enclosure Type	Number of Charging Units	Catalog Number	\$ Price
208-240 Vac	Indoor/Outdoor	30 A	Wall	3R	Single	EV230WSR	1800.00
208-240 Vac	Outdoor	30 A	Pedestal	3R	Single	EV230PSR	2400.00
208-240 Vac	Outdoor	30 A	Pedestal	3R	Dual▲	EV230PDR	4000.00

▲ Output current per charge unit

Table 29.3: Outdoor Charging Stations with RFID Access

Output Voltage System	Application	Output Current	Mounting	Enclosure Type	Number of Charging Units	Catalog Number	\$ Price
208-240 Vac	Indoor/Outdoor	30 A	Wall	3R	Single	EV230WSRR	2400.00
208-240 Vac	Outdoor	30 A	Pedestal	3R	Single	EV230PSRR	3000.00
208-240 Vac	Outdoor	30 A	Pedestal	3R	Dual■	EV230PDRR	4600.00

■ Output current per charge unit

Table 29.4: RFID Accessories ♦

Description	Catalog Number	\$ Price
RFID Handheld Programmer	EVRFIDHP	240.00
RFID Authentication Cards (Quantity of 10)	EVRFIDKF10	110.00

♦ Required for charging stations with RFID Access

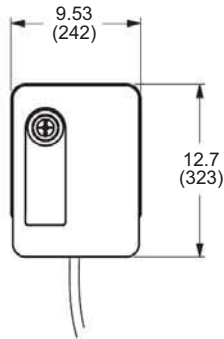
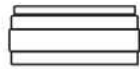


EVRFIDHP

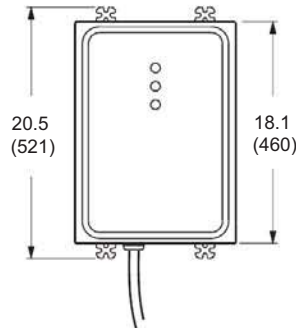
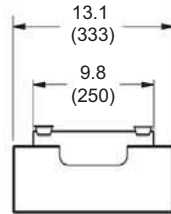


EVRFIDKF10

**Dimensions**

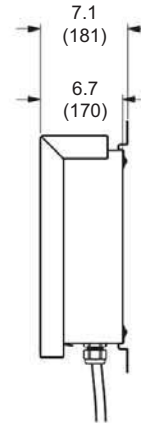


**Indoor Wall-mount**

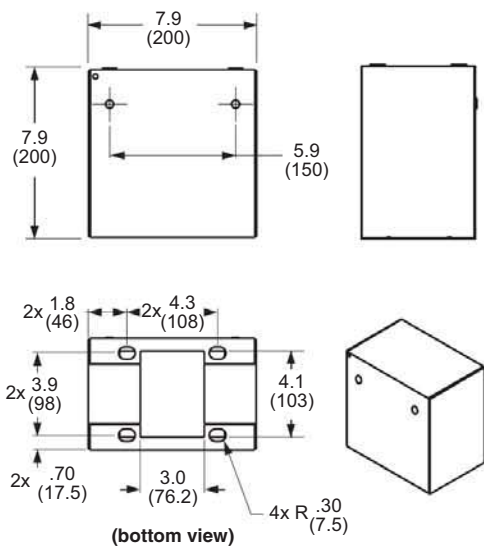
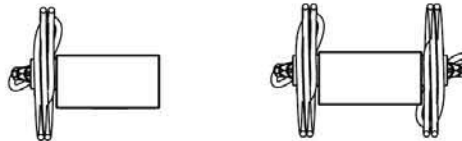


**Indoor/Outdoor Wall-mount**

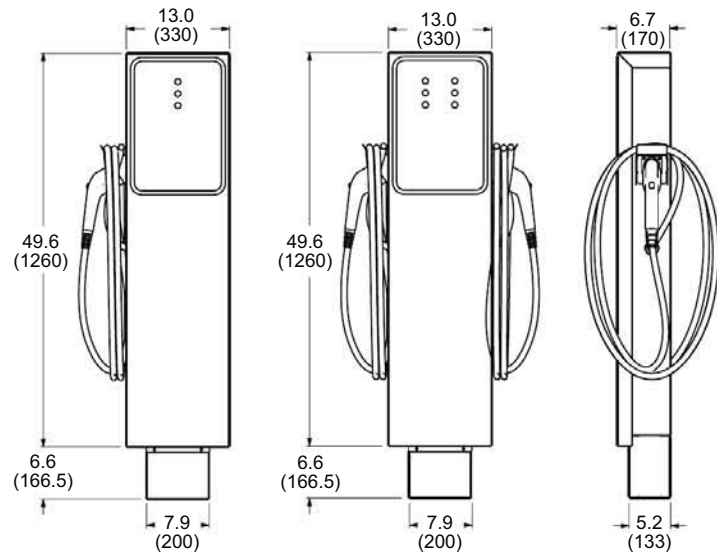
Dimensions: in. (mm)



Dimensions: in. (mm)



**Pedestal Base**



**Single Unit**

**Dual Unit**

**Pedestal Mounted Charging Stations**

### Energy Efficiency Solutions Overview

Our Wiser Energy Efficiency products can give you information about your home's energy consumption and provide ways to conveniently automate energy use. Information displays can be conveniently located and easily integrated with Smart Grid energy programs. In addition, these devices provide useful information displays such as time and temperature. HVAC thermostats, an in-home display, and load controls are designed to integrate into a seamless energy control system, allowing you to easily **Make the Most of Your Energy<sup>SM</sup>**.

#### Schneider Electric Energy Efficiency Products:

- Use industry standard radio interfaces. Products are certified to the ZigBee® Smart Energy protocol
- Provide easy to use, conveniently located controls
- Signal energy with vivid color display screens
- Are designed to be integrated into Smart Grid energy efficiency programs
- Are certified to UL916, and UL489 (as applicable)
- Incorporate convenience features, such as remote thermostat control, time-of-day display, remote load control, and load scheduling
- Load controls are available in outdoor configurations



Color Based Energy Signaling



EER20100

#### Wiser In-Home Display (IHD)

- Internal rechargeable battery for power outages and convenience
- Integrates with remote measurement devices, and graphically displays energy use and signals based on demand
- Schedules Wiser components, such as load controls, load relays, and smart plugs
- Controls Wiser thermostats from remote locations
- Automatically sets time from the network
- Displays time
- Displays outdoor temperature (optional components required)

Table 29.5: Wiser In-Home Display (IHD)

Model	Industry Specifications	Power	\$ Price
EER20100	<ul style="list-style-type: none"> <li>• UL Standard 916</li> <li>• Canadian Standard CAN/CSA C22.2, No. 205</li> <li>• ZigBee® Smart Energy</li> </ul>	100–240 Vac 50–60 Hz	550.00



EER56000  
EER56100

#### Wiser Programmable Communicating Thermostats (PCT)

- Offers four programmable temperature changes per day for up to seven days
- Supports demand response through ZigBee® Smart Energy Profile
- Integrates with remote measurement devices, and graphically displays energy use and signals based on demand
- Schedules Wiser components, such as load controls, load relays, and smart plugs
- Automatically sets time from the network
- Displays outdoor temperature (optional components required)
- No batteries required, operates in four wire installations

Table 29.6: Wiser Programmable Communicating Thermostats (PCT)

Model	Industry Specifications	Power	\$ Price
EER56000	<ul style="list-style-type: none"> <li>• UL Standard 916</li> <li>• Canadian Standard CAN/CSA C22.2, No. 205-M1983</li> <li>• ZigBee® Smart Energy</li> <li>• Single stage conventional heat/cool</li> <li>• Heat pump (two stage heat / single stage cool)</li> <li>• Dual fuel heat pump (two stage heat / single stage cool)</li> </ul>	100–240 Vac 50–60 Hz	550.00
EER56100	<ul style="list-style-type: none"> <li>• UL Standard 916</li> <li>• Canadian Standard CAN/CSA C22.2, No. 205-M1983</li> <li>• ZigBee® Smart Energy</li> <li>• Single stage conventional heat/cool</li> <li>• Two stage conventional (two stage heat / two stage cool)</li> <li>• Heat pump and geothermal heat pump (two stage heat / single stage cool)</li> <li>• Two-speed heat pump and two-speed geothermal heat pump (three stage heat / two stage cool)</li> <li>• Dual fuel heat pump and geothermal dual fuel heat pump</li> <li>• Humidifier and dehumidifier control</li> </ul>	100–240 Vac 50–60 Hz	720.00



EER40200

**Wiser Smart Plug**

- Supports demand response through ZigBee® Smart Energy Profile
- Plugs into 120 V electrical outlets
- Measures power used by electrical outlet loads
- Provides scheduling and remote control when used with the EER20100 Wiser In-Home Display or the EER56000/EER56100 Wiser Programmable Communicating Thermostats

**Table 29.7: Wiser Smart Plug**

Model	Industry Specifications	Power	\$ Price
EER40200	<ul style="list-style-type: none"> <li>• UL Standard 508 and UL 244A</li> <li>• Canadian Standard CAN/CSA C22.2, No. 14-05</li> <li>• ZigBee® Smart Energy</li> </ul>	100–240 Vac 50–60 Hz	340.00



EER42200  
EER42300

**Wiser Load Control Relays**

- Supports demand response through ZigBee® Smart Energy Profile
- Low voltage 120 and 240 V relays
- Measures power used by electrical outlet loads
- Provides scheduling and remote control when used with the EER20100 Wiser In-Home Display or the EER56000/EER56100 Wiser Programmable Communicating Thermostats
- EER42300 provides isolated contact outputs

**Table 29.8: Wiser Load Control Relays**

Model	Industry Specifications	Power	\$ Price
EER42200	<ul style="list-style-type: none"> <li>• UL Standard 916</li> <li>• Canadian Standard CAN/CSA C22.2, No. 205-M1983</li> <li>• ZigBee® Smart Energy</li> <li>• Supply voltage: 100–250 Vac, 50/60 Hz</li> </ul>	30 A, 240 Vac 30 A, 28 Vdc 2 hp, 240 Vac 1 hp, 120 Vac	405.00
EER42300	<ul style="list-style-type: none"> <li>• UL Standard 916</li> <li>• Canadian Standard CAN/CSA C22.2, No. 205-M1983</li> <li>• ZigBee® Smart Energy</li> <li>• Supply voltage: 100–250 Vac, 50/60 Hz</li> </ul>	5 A, 240 Vac 5 A, 28 Vdc 240 VA, 240 Vac	375.00



EER260LLCR

**Wiser Large Load Control**

- Supports demand response through ZigBee® Smart Energy Profile
- Used with Square D™ QOPL-ILC circuit breaker devices, ordered separately
- Measures branch circuit loading (current transformer required, ordered separately)
- Provides remote control when used with the EER20100 In-Home Display or the EER56000/EER56100 Wiser Programmable Communicating Thermostats
- Provides remote disconnect switch functions

**Table 29.9: Wiser Large Load Control**

Model	Industry Specifications	Load Contacts	\$ Price
EER260LLCR	<ul style="list-style-type: none"> <li>• UL489</li> <li>• ZigBee® Smart Energy</li> <li>• 120 / 240 Vac, 1P/2P, 50/60 Hz</li> </ul>	QOPL-ILC circuit breaker (see Table 29.10)	405.00
EER260LLCCT1	<ul style="list-style-type: none"> <li>• 1P 60 A current transformer</li> </ul>	—	50.00
EER260LLCCT2	<ul style="list-style-type: none"> <li>• 2P 60 A current transformer</li> </ul>	—	100.00



EER260LLCCT1  
EER260LLCCT2

**Table 29.10: QOPL-ILC Circuit Breakers**

Catalog Number	Rating (A)	No. of Poles	AIC Rating (kA)
QO115PLILC	15	1	10
QO120PLILC	20	1	10
QO230PLILC	30	2	10
QO240PLILC	40	2	10
QO250PLILC	50	2	10
QO260PLILC	60	2	10



EER21100  
EER21200

### Wiser Ethernet Gateway

- Allows for software monitoring, programming, and control of Wiser Energy Efficiency products via the internet
- Used with the Wiser Head End Server system

**Table 29.11: Wiser Ethernet Gateway**

Model	Industry Specifications	\$ Price
EER21100	<ul style="list-style-type: none"> <li>• ZigBee® Router type device</li> <li>• UL power adapter</li> <li>• ZigBee® Smart Energy</li> <li>• Supply voltage: 100–240 Vac, 50/60 Hz</li> </ul>	395.00
EER21200	<ul style="list-style-type: none"> <li>• ZigBee® Coordinator type device</li> <li>• UL power adapter</li> <li>• ZigBee® Smart Energy</li> <li>• Supply voltage: 100–240 Vac, 50/60 Hz</li> </ul>	395.00



EER57000

### Wiser Accessories

- Trim ring can be used to conceal mounting imperfections, such as holes and paint lines from previous installations
- External temperature sensor provides temperature measurements when used with Wiser thermostats
- Auxiliary power supply permits Wiser thermostats to be used in specialized four wire installations

**Table 29.12: Wiser Accessories**

Model	Name	Industry Specifications	\$ Price
EER57000	Trim Ring	—	50.00
EER57100	Auxiliary Power Supply	<ul style="list-style-type: none"> <li>• UL Standard 916</li> <li>• Canadian Standard CAN/CSA C22.2, No. 205-M1983</li> </ul>	75.00
EER57200	External Temperature Sensor	—	90.00



EER57100



EER57200



### Conext™ Series Grid Tie Inverters

The Conext™ Grid Tie Solar Inverter (Conext Series) converts photovoltaic (PV) electricity produced by solar modules into utility grade power that can be used by the home or sold to a local electrical utility. Offering high performance, clean aesthetics, innovative features, and easy installation, the Conext Series provides great value in a compact high-frequency design. The Conext Series may be installed as a single inverter for a single PV array or in a multiple inverter configuration for large PV systems or three-phase applications.



Conext™ Series  
Grid Tie Inverter

#### Features

- An NEC compliant, integrated Square D™ DC/AC disconnect eliminates the need for external DC (PV) disconnects and in some jurisdictions, AC disconnects
- Large heatsink offers excellent heat dispersion without the need for a cooling fan
- Liquid Crystal display provides instantaneous information—power level, daily and lifetime energy production, PV array voltage and current, utility voltage and frequency, time online “selling”, system troubleshooting messages, and installer-customized screens
- User-enabled Fast Sweep™ Maximum Power Point Tracking (MPPT) increases energy harvest in shaded installations
- LCD vibration sensor allows the tap of a finger to turn backlight on and easily cycle through display screens
- FCC Class B compliance

#### Installation

- Flexible Module selection due to wide PV input MPPT tracking voltage range
- Lightweight and versatile mounting bracket
- Easy access DC (PV) and AC (Utility) terminal blocks simplify wiring
- Rugged NEMA 3R inverter enclosure allows reliable indoor and outdoor installations
- Simple communications set-up for daisy-chained single phase and three-phase installation

#### Servicability

- Sealed inverter enclosure can be quickly separated from the wiring box allowing DC/AC connections to remain intact during a service event
- Ten-year standard warranty

**Table 29.13: Conext™ Inverters**

Product	Description	Part Number	\$ Price
Conext TX 2800 NA	2.8 kW inverter 208/240 V	RNW-878-2801	2040.00
Conext TX 3300 NA	3.3 kW inverter 208/240 V	RNW-878-3301	2410.00
Conext TX 3800 NA	3.8 kW inverter 208/240 V	RNW-878-3801	2575.00
Conext TX 5000 NA	5.0 kW inverter 208/240 V	RNW-878-5001	3250.00

**Table 29.14: Residential Grid-Tie Solar Package**

System Voltage	Kilowatts	Amps	DC Disconnect	Inverter	AC Disconnect	Suggested Load Center▲
250 Vdc	2.8	30	HU361RB	878-2801	D221NRB	QO130M200
250 Vdc	3.3	60	HU362RB	878-3301	D222NRB	QO140M225
250 Vdc	3.3	100	HU363RB	878-3301	D223NRB	QONQ42MS400
600 Vdc	3.8	30	HU361RB	878-3801	D221NRB	QO130M200
600 Vdc	5.0	60	HU362RB	878-5001	D222NRB	QO140M225
600 Vdc	5.0	100	HU363RB	878-5001	D223NRB	QONQ42MS400

▲ Consult Digest Section 1 for other load center options, covers, accessories, and circuit breakers.

**NOTE:** See Digest Section 3 for additional PV switch offerings including the new UL98B 1000 Vdc PV disconnect.

Table 29.15: Specifications

Electrical Specifications (Output)				
Product Model	Conext TX 2800 NA	Conext TX 3300 NA	Conext TX 3800 NA	Conext TX 5000 NA
Nominal output power	2800 W / 2650 W	3300 W / 3100 W	3800 W / 3500 W	5000 W / 4500 W
AC output voltage (nominal)	240/208 Vac	240/208 Vac	240/208 Vac	240/208 Vac
AC output voltage range	Auto detect 240 to 208 Vac			
AC frequency (nominal)	60 Hz			
AC frequency range	59.3 to 60.5 Hz			
Max. continuous output current	11.8/13.0 A rms	14.0/15.2 A rms	16.0/16.8 A rms	21/22 A rms
Max. output over-current protection	15 A rms	20 A rms	25 A rms	30 A rms
Max. utility back-feed current	0 A			
Total harmonic distortion (THD)	THD < 3%			
Power factor	>0.99 (at rated power), >0.95 (full power range)			
Utility monitoring, islanding protection	UL 1741-2010, Ed.2 / IEEE1547			
Output characteristics	Current Source			
Output current waveform	True Sine Wave			
Electrical Specifications (Input)				
Max. Array open-circuit voltage	600 Vdc			
MPPT voltage range (CEC & CSA)	195-550 Vdc	195-550 Vdc	195-550 Vdc	240-550 Vdc
Max. input current	15.5 Adc / 14.9 Adc	18 Adc / 17.5 Adc	20.8 Adc / 19.5 Adc	22 Adc / 20 Adc
Max. array short-circuit current	24 Adc			
Reverse-polarity protection	Short-circuit diode			
Ground-fault protection	GF detection, I <sub>DIF</sub> > 1A			
Max. Peak efficiency	95.2% / 95.2%	95.6% / 95.3%	96.3% / 96%	96.7% / 96.4%
CEC Efficiency	94.5% / 94.5%	95% / 94.5%	95.5% / 95.5%	96.0% / 95.5%
Night-time power consumption	1 W			
General Specifications				
Mounting	Wall mount (mounting bracket included)			
Input and output terminal	AC and DC terminals accept wires sizes #14 to #6 AWG			
PV / Utility disconnect	Eliminates need for external PV (DC) disconnect. Complies with NEC requirements.			
Cooling	Convection cooled, fan not required			
Display	Backlit, two-line, 16-character liquid crystal display provides instantaneous power, daily and lifetime energy production, PV array voltage and current, utility voltage and frequency, time online "selling", faults messages, and installer-customizable screens			
Communications	Integrated RS232 and Xanbus™ RJ45 communication ports			
Wiring box	PV, utility, ground, and communications connections. The inverter can be separated from the wiring box.			
Warranty	Ten-year standard			
Part number (negative ground)	878-2801	878-3301	878-3801	878-5001
Environmental Specifications				
Operating Temperature Range	-13°F to 149°F (-25°C to 65°C)			
Enclosure Type	NEMA 3R (Outdoor Rated)			
Inverter Weight	31.8 kg (70.1 lbs)	32.2 kg (71 lbs)	36.5 kg (80.5 lbs)	38.9 kg (85.8 lbs)
Inverter dimensions (H x W x D)	89.3 x 40.3 x 18.5 cm 35.2 x 15.9 x 7.3 in.	89.3 x 40.3 x 18.5 cm 35.2 x 15.9 x 7.3 in.	98.8 x 40.3 x 18.5 cm 38.9 x 16 x 7.3 in.	98.8 x 40.3 x 18.5 cm 38.9 x 16 x 7.3 in.
Shipping dimensions (H x W x D)	107.0 x 57.7 x 26.0 cm 42.1 x 22.7 x 10.2 in.	107.0 x 57.7 x 26.0 cm 42.1 x 22.7 x 10.2 in.	116.5 x 57.7 x 26.0 cm 45.8 x 22.7 x 10.2 in.	116.5 x 57.7 x 26.0 cm 45.8 x 22.7 x 10.2 in.
Regulatory Approvals				
CSA Certified to UL 1741-2010 Ed.2 (Include IEEE 1547)—inverters, converters, controllers and interconnection system equipment for use with distributed energy resources; and CSA C22.2 No 107.1 FCC Class B general use power supplies.				