



Fiberglass Enclosures

ENC8/10, ENC10/12, ENC10/12R, ENC12/14, ENC14/16, and ENC16/18



Rugged, Versatile

Campbell components
mount easily and securely

Overview

Campbell Scientific offers fiberglass-reinforced polyester enclosures for housing our dataloggers and peripherals. Dataloggers and peripherals housed in an enclosure with desiccant are protected from water and most pollutants.

Benefits and Features

- Weather resistant to protect instruments
- Backplate designed so that Campbell Scientific components mount easily and securely
- White, UV-stabilized enclosure reflects solar radiation—reducing temperature gradients inside the enclosure without requiring a separate radiation shield

Enclosure Supply Kit

The enclosure supply kit is included with these enclosures. The equipment aids in mounting your equipment inside the enclosure as well as monitoring relative humidity and sealing the enclosure. The kit consists of desiccant packs, humidity indicator card, cable ties, putty, screws, grommets, PVC plug, and a Phillips-head screwdriver.

Cable-Entry Option Details

Conduit(s)

Multiple cables can be routed through the conduit. A plug included in the 7363 enclosure supply kit can reduce the conduit's internal diameter to 1.3 cm (0.5 in). The enclosure supply kit also contains the putty used to seal each conduit.

Entry Seals

Cable-entry seals have a more water-tight seal than the conduits. Each entry seal is compressed around one cable. A small vent is included to equalize pressure with the atmosphere. The entry seals come in three sizes that accept the following cable diameters:

- Large—6 to 13 mm (0.24 to 0.51 in)
- Medium—5.8 to 10 mm (0.23 to 0.39 in)
- Small—3 to 7 mm (0.12 to 0.28 in)

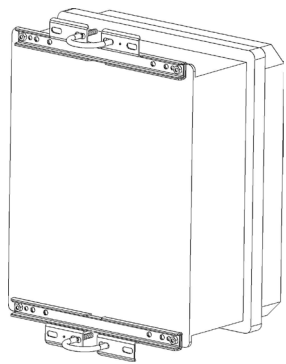
The number of cable-entry seals provided depends on the enclosure model:

- ENC8/10—(6) small
- ENC10/12—(1) medium, (2) small
- ENC10/12R—(1) medium, (2) small
- ENC12/14—(2) medium, (4) small
- ENC14/16—(2) large, (2) medium, (2) small
- ENC16/18—(2) large, (2) medium, (2) small

questions & quotes: 435.227.9120

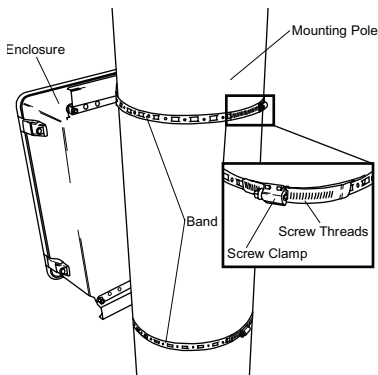
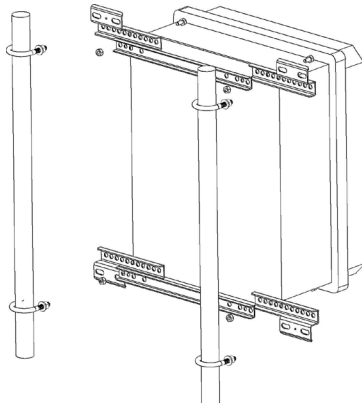
campbellsci.com/standard-enclosures



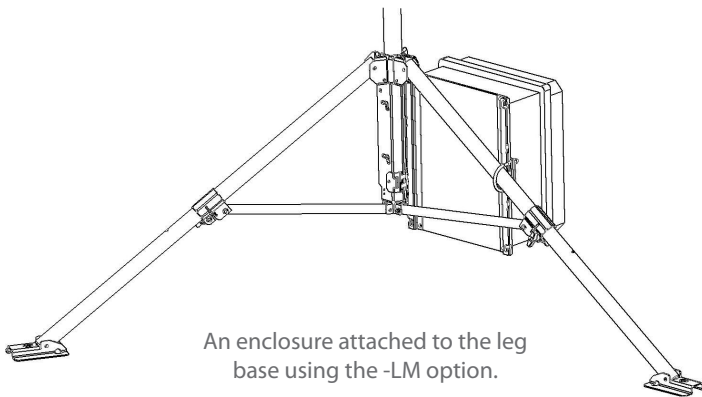


At left is an enclosure with the -MM mount option. The bracket is ready to be attached to a mast or user-supplied vertical pipe with a 1.25-inch to 2.1-inch outer diameter.

At right is an exploded view of the -TM option. It shows the bracket components and how the enclosure attaches to a tower.



At left shows the -PM option, where the enclosure is mounted to a large diameter pole via band clamps.



An enclosure attached to the leg base using the -LM option.

Ordering Information

Fiberglass Enclosures

- ENC8/10** Weather-Resistant 8-by-10-inch Enclosure. Includes an internal plate punched with a grid of 0.5-inch-on-center holes.
- ENC10/12** Weather-Resistant 10-by-12 inch Enclosure. Includes an internal plate punched with a grid of 0.5-inch-on-center-holes.
- ENC10/12R** Weather-Resistant 10-by-12 inch Enclosure with raised lid. Includes an internal plate punched with a grid of 0.5-inch-on-center holes.
- ENC12/14** Weather-Resistant 12-by-14-inch Enclosure. Includes an internal plate punched with a grid of 0.5-inch-on-center holes.
- ENC14/16** Weather-Resistant 14-by-16-inch Enclosure. Includes an internal plate punched with a grid of 0.5-inch-on-center holes.
- ENC16/18** Weather-Resistant 16-by-18-inch Enclosure. Must choose a backplate option (see below).

Enclosure Hole Options

- NC** No cable entry hole.
- SC** One 3.8 cm (1.5 in) diameter conduit for cable entry.
- DC** Two horizontally-arranged 3.8 cm (1.5 in) diameter conduits for cable entry (not available for ENC8/10)
- VC** Two vertically-arranged 3.8 cm (1.5 in) diameter conduits for cable entry (available only for ENC16/18).
- ES** Individual-Cable Entry Seals. Number of cable entry seals provided depends on the enclosure model (see page 1)

Enclosure Mounts Options

Contact Campbell Scientific for information about special brackets that attach enclosures to CTS Towers, Rohn Towers, Aluma Towers, or other non-Campbell Scientific instrument mounts. Only the -NM and -MM options are available for the ENC8/10 enclosure.

- NM** No enclosure mounting
- MM** Tripod Mast Mounting for attachment to the mast of a Campbell Scientific tripod or to a user-supplied pipe with a 3.18 to 5.33 cm (1.25 to 2.1 in) outer diameter.
- LM** Tripod Leg Mounting for attachment to the leg base of a Campbell Scientific tripod. For the ENC16/18, this mounting option is only compatible with our CM106B tripod.
- TM** Tower Mounting for attachment to a UT10, UT20, or UT30 tower (see note at bottom of page).
- PM** Pole Mounting for attachment to a large-diameter pole with a 10.16 to 24.4 cm (4 to 10 in) outer diameter.
- EM** Hangar Mounting Kit (available only for ENC10/12, ENC10/12R, and ENC12/14). This option uses strut clamps and a hangar bracket to mount the enclosure to a mast or pole with a 7.6 cm (3 in) outer diameter.

Backplate Options for ENC16/18 only

- SB** Standard Backplate with a grid of 0.5-inch-on-center holes for mounting devices.
- EL** Backplate and sideplate on the left side. Both plates include a grid of 0.5-inch-on-center holes for mounting devices.
- ER** Backplate and sideplate on the right side. Both plates include a grid of 0.5-inch-on-center holes for mounting devices.

Note: Enclosures with the -TM option are shipped configured for the UT10 tower. UT20 and UT30 customers will need to:

- (1) Remove the bolts attaching the bracket to the enclosure.
- (2) Slide out the flange sections so that the distance between the center of each flange is 43.2 cm (17 in).
- (3) Reattach the bracket to the enclosure using the original bolts.



The CD100 has a vacuum fluorescent display for responsive use through a very wide operating temperature range. It has a water and dust ingress protection rating of IP66 when installed.



The 32788 includes an adjustable bracket that allows the solar panel to be placed at the optimal angle for receiving maximum insolation.



The 31143 stack bracket is hinged, allowing easy access to the lower component during wiring or during maintenance.

Ordering Information Continued

Bulkhead Surge Protection Installations

These accessories are offered for enclosures that will house a wireless device. They include surge protection and allow an antenna to be connected to the outside of the enclosure. Only the 31312 and 31315 are available for the ENC8/10.

- 31312** For type N-to-RPSMA antenna cable and 700 to 2700 MHz frequency range. Compatible devices include RF407, RF412, RF451, and RF401-series radios, CR6 and CR300-series dataloggers, AVW200-series Interfaces, or CWB100-series wireless bases.
- 31315** For N-to-SMA antenna cable and 700 to 2700 MHz frequency range. Compatible devices include Iridium9522 satellite modem and RV50 cellular modems.
- 31318** For type N-to-type N antenna cable and 700 to 2700 MHz frequency range. Typically used with the retired FGR-11R-series radios.
- 31321** For type N-to-TNC antenna cable and 700 to 2700 MHz frequency range. Typically used with the HUGHES9502 Inmarsat-BGAN transmitter.
- 31324** For type N-to-SMA GPS antenna cable. Compatible with the GPS device included with our GOES and Iridium9522B satellite transmitters and the AL200 ALERT transmitter
- 31327** For type N-to-type N antenna cable and 100 to 512 MHz frequency range. Typically used with GOES satellite transmitters.
- 31330** For type N-to-BNC antenna cable and 100 to 512 MHz frequency range used with the ST-21 Argos Satellite Transmitter and the RF320-series VHF/UHF radios.

Other Campbell-Installed Accessories

- 28701** Enclosure Desiccant and Document Holder Installed in Enclosure Lid. It contains a zipped bag for two-packs of desiccant and an open pocket for documents. Not available for the ENC8/10.
- 27814** CD100 Mountable Display with Keypad Installed in Enclosure Lid. The CD100 provides the same operation and functionality as the CR1000KD, allowing both data entry and display without opening the enclosure. It is typically used with our CR800, CR1000X, and CR1000 dataloggers.
- 18132** CD295 DataView II Display Installed in Enclosure Lid. The CD295 displays real-time data only, and is used with the CR800, CR850, CR1000, and CR3000 dataloggers.
- 18166** Door Open Indicator Installed in Enclosure. It uses a datalogger control port to monitor when the enclosure door is open.
- 32788** 5 W Solar Panel installed on the lid of an ENC8/10. The solar panel's cable is routed through a cable-entry seal that's been added to the lid.

Miscellaneous Accessories

- 10525** User-installed two-pack desiccant holder that mounts to the inside of the enclosure lid. Not available for the ENC8/10.
- 32464** User-installed desiccant holder for the ENC8/10.
- CS210** Enclosure Humidity Sensor contains an Elan HM2000-series precision bulk polymer relative humidity sensor. Change the deiccant when the CS210 senses releative huidity levels of 35% or higher.
- 6714** Replacement Desiccant 4 Unit Bag (Qty 20).
- 31551** Enclosure Leg Stack Mounting Kit (does not fit in the ENC8/10 or ENC10/12).
- 31143** Hinged Stack Bracket Kit (does not fit in the ENC8/10 or ENC10/12).
- 18165** User-installed door open indicator. It uses a datalogger control port to monitor when the enclosure door is open.

Specifications

	ENC8/10	ENC10/12	ENC10/12R	ENC12/14	ENC14/16	ENC16/18
Can House	CR300-series datalogger and small power supply or peripheral without datalogger. Will fit a CR6, CR800, CR850, CR1000X, or CR1000 if mounted vertically. More information: www.campbellsci.com/enc-8-10	CR300-series, CR6, CR800, CR850, CR1000X, or CR1000 datalogger, power supply, and a small peripheral (depending on footprint).	CR300-series, CR6, CR800, CR850, CR1000X, or CR1000 datalogger, power supply, and a small peripheral.	CR300-series, CR6, CR800, CR850, CR1000X, CR1000, or CR3000 datalogger, power supply, and one or more peripherals (depending on footprint).	CR300-series, CR6, CR800, CR850, CR1000X, CR1000, or CR3000 datalogger, power supply, and one or more peripherals (depending on footprint).	CR300-series, CR6, CR800, CR850, CR1000X, CR1000, or CR3000 datalogger, power supply, and one or more peripherals (depending on footprint).
Color	White (reflects solar radiation, reducing temperature gradients inside the enclosure without using a separate radiation shield)					
Construction	Fiberglass-reinforced polyester enclosure with door gasket, external grounding lug, stainless-steel hinge, and lockable hasps					
Classification	NEMA 4X (before being modified for cable entry)					
Internal Dimensions (w x h x d)	24.8 x 19.7 x 15.9 cm (9.7 x 7.7 x 6.3 in)	25.4 x 30.5 x 11.4 cm (10 x 12 x 4.5 in)	25.4 x 30.5 x 14 cm (10 x 12 x 5.5 in)	30.5 x 35.6 x 14 cm (12 x 14 x 5.5 in)	40.6 x 35.6 x 14 cm (14 x 16 x 5.5 in)	40.6 x 45.7 x 22.9 cm (16 x 18 x 9 in)
Under Lid Space (w x h x d)	N/A	N/A	23.4 x 28.4 x 15.1 cm (9.2 x 11.2 x 5.9 in)	28.3 x 33.5 x 17.6 cm (11.2 x 13.2 x 6.9 in)	33.7 x 38.6 x 17.6 cm (13.3 x 15.2 x 6.9 in)	38.7 x 43.8 x 25.2 cm (15.3 x 17.3 x 9.9 in)
External Dimensions (w x h x d)	30.4 x 23.9 x 16.5 cm (12.0 x 9.4 x 6.5 in)	29.0 x 34.1 x 13.2 cm (11.4 x 13.4 x 5.2 in)	29.0 x 34.1 x 19.5 cm (11.4 x 13.4 x 7.7 in)	34.0 x 39.1 x 19.5 cm (13.4 x 15.4 x 7.7 in)	39.2 x 44.3 x 19.6 cm (15.4 x 17.8 x 7.7 in)	44.4 x 49.5 x 27.0 cm (17.5 x 19.5 x 10.6 in)
Weight	2.36 kg (5.2 lb)	4.1 kg (9 lb)	4.1 kg (9 lb)	5 kg (11.2 lb)	6 kg (13 lb)	7.7 kg (17 lb)
EU Declaration of Conformity	Available at: www.campbellsci.com/enc-8-10	Available at: www.campbellsci.com/enc-10-12	Available at: www.campbellsci.com/enc10-12r	Available at: www.campbellsci.com/enc-12-14	Available at: www.campbellsci.com/enc14-16	Available at: www.campbellsci.com/enc-16-18