



OVERVIEW

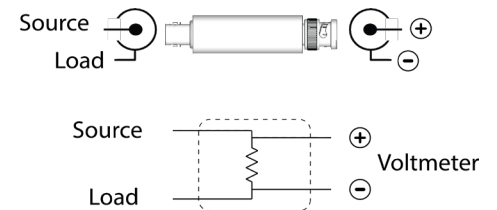
Verivolt Encore is part of the Verivolt family of current to voltage transducers designed to measure isolated and ground currents. The main focus of the Encore family is to ease and accelerate measuring the output current from low voltage current sources as well as isolated current transformers (CT). Particular attention was paid on providing a solution that minimizes cost and improves overall performance on distributed systems such as substations, building monitoring, power distribution systems, etc. The Encore series covers the ranges of $\pm 0.1A$, $\pm 1A$, $\pm 2A$, $\pm 3A$, $\pm 4A$ and $\pm 5A$ with customizable bandwidth of up to 40kHz and 0.2% accuracy

SPECIFICATION

| Electronical | 0.1A | 0.5A | 1A | 2A | 3A | 4A | 5A |
|--|-----------------------------|----------------|----------------|---------------|----------------|---------------|---------------|
| Scaling Factor (1V output voltage) | 1 : 1 | 5 : 1 | 10:1 | 20:1 | 30:1 | 40:1 | 50:1 |
| Overload Current (60Hz sinewave for 10s) | 0.5Arms | 2.5Arms | 5Arms | 10Arms | 15Arms | 20Arms | 25Arms |
| Input impedance at 60Hz | 1 Ω | 200 m Ω | 100 m Ω | 50 m Ω | 333 m Ω | 25 m Ω | 20 m Ω |
| Output impedance | 2k Ω | | | | | | |
| Accuracy 2 σ / (3 σ) | $\pm 0.2\%$ ($\pm 0.4\%$) | | | | | | |
| Bandwidth (-3dB point) | 40kHz | | | | | | |
| Input-Output non-linearity | < 40 ppm/V | | | | | | |
| Output voltage | $\pm 100mV$ | | | | | | |
| Gain temperature drift | ± 25 ppm/ $^{\circ}C$ | | | | | | |
| Phase mismatch | < 0.05 $^{\circ}$ /kHz | | | | | | |
| Output type | Single-ended signal | | | | | | |
| Output impedance | < $\pm 10\mu V$ | | | | | | |
| Output connector | BNC (Plug) | | | | | | |

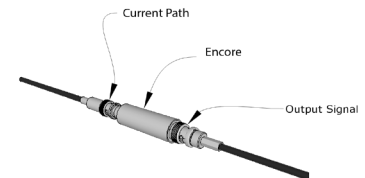
HARDWARE DESCRIPTION

Verivolt Encore 5c operates as a current to voltage shunt that generates a $\pm 100mV$ range signal for its nominal input current range. This signal can then be processed by a computer based measurement platform. In conjunction with the EasyConnect family, the Encore is the ideal solution for high channel density applications



Functional Diagram of Encore

| Environmental | |
|-----------------------|------------------------|
| Operating temperature | - 35 to 70 $^{\circ}C$ |
| Storage temperature | - 40 to 80 $^{\circ}C$ |



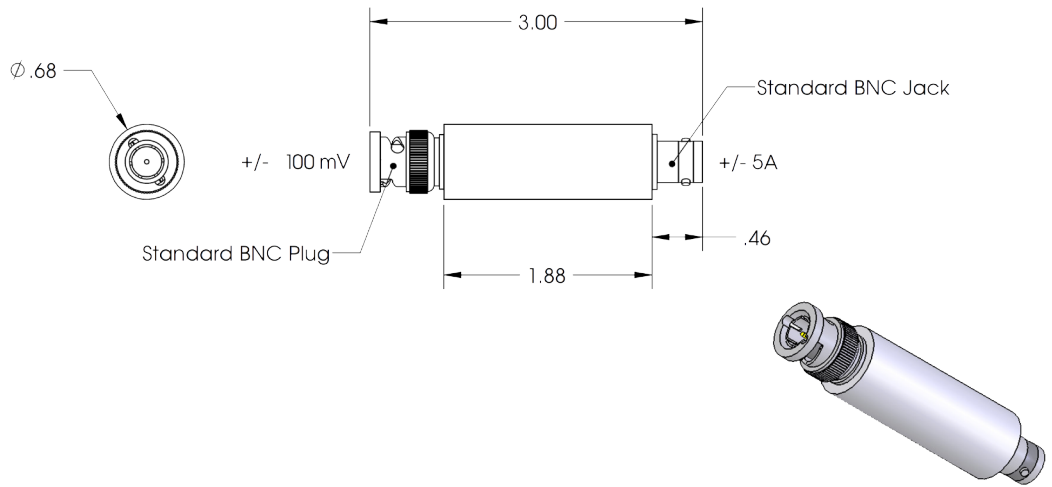
Mounting example of Encore

Due to its compact size and shape, the Encore can be easily mounted anywhere between the signal source and the data acquisition system. The versions up to 5A may even be used inline with the cable and not require any mounting at all. All can be secured to fixtures using cable ties.

| Mechanical | |
|--------------------------------------|----------------------------|
| Input connector (1-Pin Coaxial) | BNC |
| Outer Dimensions (Cylindrical shape) | 0.68" \varnothing x 3.0" |
| Weight | 34 g (1.2 oz) |

(1) Form factor can vary for customized solutions.

MERCHICAL DIMENSIONS

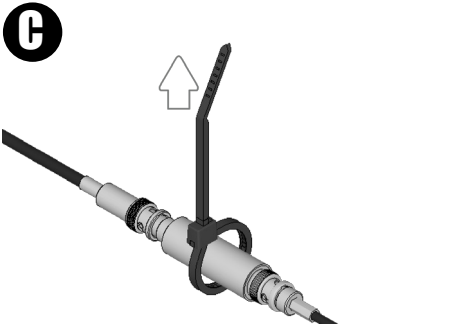
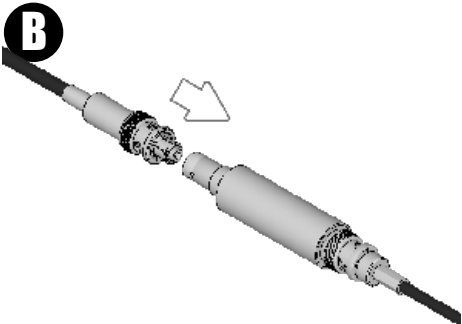
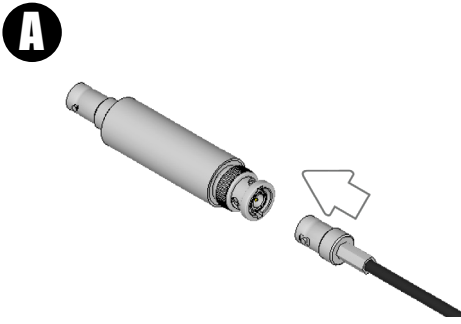


HARDWARE CONFIGURATION

A. Connect BNC cable to sensor output. Make sure the BNC jack is connected to DAQ or at least properly grounded.

B. Make sure Input Signal cable is de-energized to avoid arcing. Verify if input connectors are clean. Plug input signal into input connector of sensor.

C. Secure sensor to avoid accidental disconnection during operation



Standards and Certifications

• CE



⚠ DANGER

THIS SENSOR IS NOT A SAFETY DEVICE AND IS NOT INTENDED TO BE USED AS A SAFETY DEVICE. This sensor is designed only to detect and read certain data in an electronic manner and perform no use apart from that, specifically no safety-related use. This sensor product does not include self-checking redundant circuitry, and the failure of this sensor product could cause either an energized or de-energized output condition, which could result in death, serious bodily injury, or property damage.