

Crestron **GLS-EM-CTI**
 Crestron Green Light® Current Transformer Interface for Branch
 Circuit Monitoring
 Installation Guide



Further Inquiries

To locate specific information or resolve questions after reviewing this guide, contact Crestron's True Blue Support at 1-888-CRESTRON [1-888-273-7876] or, for assistance within a particular geographic region, refer to the listing of Crestron worldwide offices at www.crestron.com/offices.

To post a question about Crestron products, log onto Crestron's Online Help at www.crestron.com/onlinehelp. First-time users must establish a user account to fully benefit from all available features.

Future Updates

As Crestron improves functions, adds new features, and extends the capabilities of the GLS-EM-CTI, additional information may be made available as manual updates. These updates are solely electronic and serve as intermediary supplements prior to the release of a complete technical documentation revision.

Check the Crestron website periodically for manual update availability and its relevance. Updates are identified as an "Addendum" in the Download column.

WARNING: To avoid fire, shock, or death, turn off power at circuit breaker or fuse and test that power is off before wiring!

NOTES: Observe the following points.

- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- This product should be installed by a qualified electrician.
- Sensors must be mounted on a vibration free surface.

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Installation Guide - DOC. 7297B
(2032461)
07.14



Specifications subject to change without notice.

This product is Listed to applicable UL Standards and requirements by Underwriters Laboratories Inc.



INTRODUCTION

The Crestron Green Light® GLS-EM-CTI is a current transformer interface designed for use with a GLS-EM-MCU Crestron Green Light Power Meter Control Unit. The GLS-EM-CTI current transformer interface, in conjunction with the main control unit, facilitates the monitoring of multiple branch circuits. This allows users to monitor the power consumption of a particular area or device. Crestron® GLS-EM-CT current transformers are placed around the feed wire of each circuit and then connected to the GLS-EM-CTI current transformer interfaces. As many as four GLS-EM-CTI units can connect to a single GLS-EM-MCU power meter control unit for monitoring of up to 84 branch circuits.

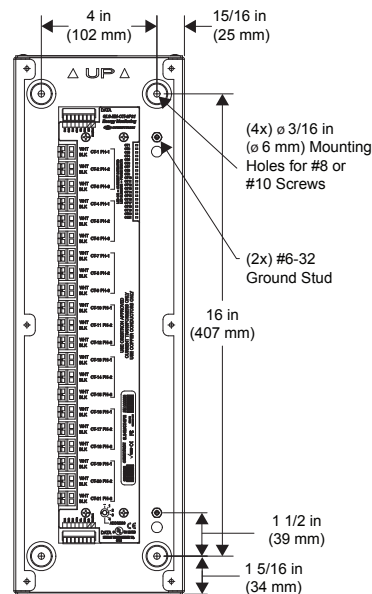
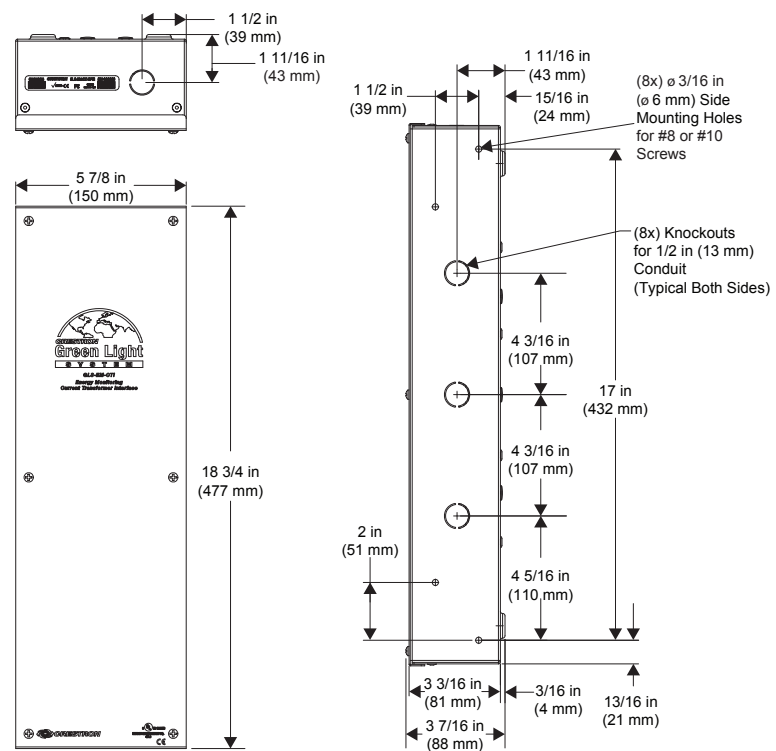
Models

MODEL	DESCRIPTION
GLS-EM-CTI-2P6	6-Channel, 2-Phase Current Transformer Interface
GLS-EM-CTI-2P15	15-Channel, 2-Phase Current Transformer Interface
GLS-EM-CTI-2P21	21-Channel, 2-Phase Current Transformer Interface
GLS-EM-CTI-3P6	6-Channel, 3-Phase Current Transformer Interface
GLS-EM-CTI-3P15	15-Channel, 3-Phase Current Transformer Interface
GLS-EM-CTI-3P21	21-Channel, 3-Phase Current Transformer Interface

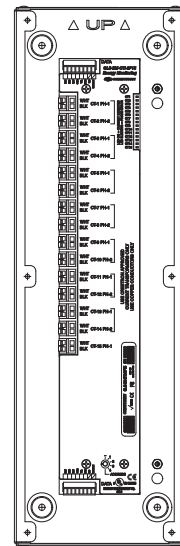
INSTALLATION

The GLS-EM-CTI is attached to a mounting surface using four standard #8 or #10 screws. Once the unit is properly secured to the mounting surface, the units must be properly wired. Refer to "Wiring" on the following page for details.

GLS-EM-CTI Overall Dimensions



GLS-EM-CTI-3P21 (Cover Removed)



GLS-EM-CTI-2P15 (Cover Removed)

Wire the GLS-EM-MCU to the GLS-EM-CTI

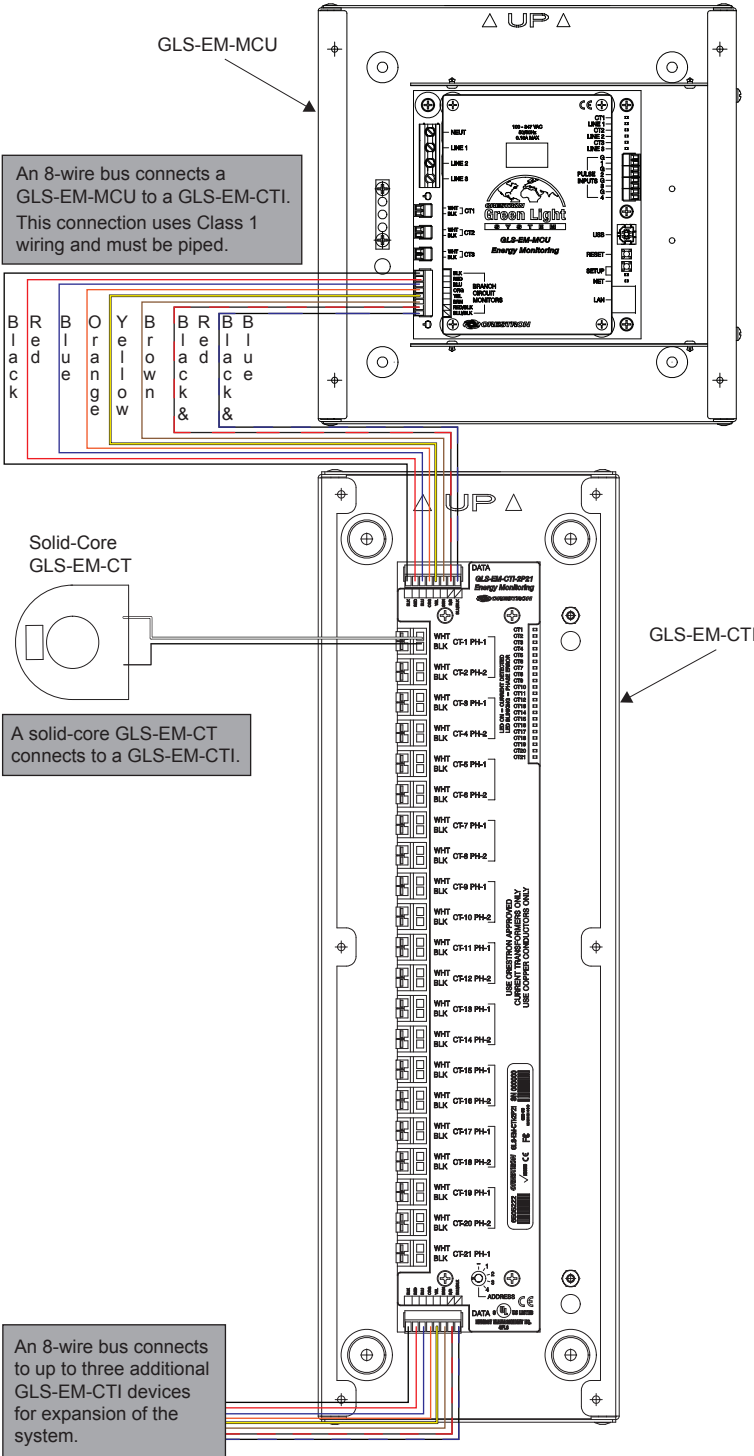
Connect the GLS-EM-MCU (sold separately) to the GLS-EM-CTI via the 8-wire bus. Ensure that the connectors are terminated properly. Refer to the illustration below for details. The connection between the GLS-EM-MCU and the GLS-EM-CTI must be less than 25 feet (~7 1/2 meters) long. Connect up to three additional GLS-EM-CTIs using the included 6 foot (~1 1/2 meter) long 8-wire bus.

Wire the GLS-EM-CT Devices

NOTE: To prevent wire noise, the maximum distance between a GLS-EM-CTI (or GLS-EM-MCU) and a GLS-EM-CT should not exceed 50 feet (15 1/4 meters).

Connect the GLS-EM-CT devices to the CT ports on the GLS-EM-CTI. Ensure that the white wire is connected to the port labeled WHT and the black wire is connected to the port labeled BLK. The appropriate CT LED illuminates if properly wired. If the device is incorrectly wired, the appropriate CT LED blinks. Refer to the illustration below for wiring details. For additional wiring instructions for the GLS-EM-CT, refer to the GLS-EM-CT Installation Guide (Doc. 7296) at www.crestron.com/manuals.

Wire the GLS-EM-MCU, GLS-EM-CTI, and GLS-EM-CT



An 8-wire bus connects a GLS-EM-MCU to a GLS-EM-CTI. This connection uses Class 1 wiring and must be piped.

A solid-core GLS-EM-CT connects to a GLS-EM-CTI.

An 8-wire bus connects to up to three additional GLS-EM-CTI devices for expansion of the system.

NOTE: The current transformer wires must be connected to an input with the same phase designation as the breaker it is monitoring. Terminals on a GLS-EM-CTI alternate phasing (A, B, A, B for 2-phase systems and A, B, C, A, B, C for 3-phase systems).

Merchandise Returns / Repair Service

1. No merchandise may be returned for credit, exchange or service without prior authorization from Crestron. To obtain warranty service for Crestron products, contact an authorized Crestron dealer. Only authorized Crestron dealers may contact the factory and request an RMA (Return Merchandise Authorization) number. Enclose a note specifying the nature of the problem, name and phone number of contact person, RMA number and return address.
2. Products may be returned for credit, exchange or service with a Crestron Return Merchandise Authorization (RMA) number. Authorized returns must be shipped freight prepaid to Crestron, 6 Volvo Drive, Rockleigh, N.J. or its authorized subsidiaries, with RMA number clearly marked on the outside of all cartons. Shipments arriving freight collect or without an RMA number shall be subject to refusal. Crestron reserves the right in its sole and absolute discretion to charge a 15% restocking fee plus shipping costs on any products returned with an RMA.
3. Return freight charges following repair of items under warranty shall be paid by Crestron, shipping by standard ground carrier. In the event repairs are found to be non-warranty, return freight costs shall be paid by the purchaser.

Crestron Limited Warranty

Crestron Electronics, Inc. warrants its products to be free from manufacturing defects in materials and workmanship under normal use for a period of three (3) years from the date of purchase from Crestron, with the following exceptions: disk drives and any other moving or rotating mechanical parts, pan/tilt heads and power supplies are covered for a period of one (1) year; touch screen display and overlay components are covered for 90 days; batteries and incandescent lamps are not covered.

This warranty extends to products purchased directly from Crestron or an authorized Crestron dealer. Purchasers should inquire of the dealer regarding the nature and extent of the dealer's warranty, if any. Crestron shall not be liable to honor the terms of this warranty if the product has been used in any application other than that for which it was intended or if it has been subjected to misuse, accidental damage, modification or improper installation procedures. Furthermore, this warranty does not cover any product that has had the serial number altered, defaced or removed.

This warranty shall be the sole and exclusive remedy to the original purchaser. In no event shall Crestron be liable for incidental or consequential damages of any kind (property or economic damages inclusive) arising from the sale or use of this equipment. Crestron is not liable for any claim made by a third party or made by the purchaser for a third party.

Crestron shall, at its option, repair or replace any product found defective, without charge for parts or labor. Repaired or replaced equipment and parts supplied under this warranty shall be covered only by the unexpired portion of the warranty.

Except as expressly set forth in this warranty, Crestron makes no other warranties, expressed or implied, nor authorizes any other party to offer any warranty, including any implied warranties of merchantability or fitness for a particular purpose. Any implied warranties that may be imposed by law are limited to the terms of this limited warranty. This warranty statement supersedes all previous warranties.

The specific patents that cover Crestron products are listed at patents.crestron.com.

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