Cambium AC+DC Enhanced Power Injector Hazardous Location Guide

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About this guide

This guide identifies the specific requirements that must be met by the installer and operator of the Cambium Networks AC+DC Enhanced Power Injector with ATEX/HAZLOC compliant radio products when the products are intended for use in Hazardous Locations.

Hazardous Locations are those covered by the ATEX regulations in Europe and the HAZLOC regulations in the USA.

Version information

Document number and version: phn-4433 003v000 (March 2017).

User documentation

Full installation planning instructions and a list of components is available in the radio platform user guide which the AC+DC Enhanced Power Injector is being installed with.

For full PMP/PTP 450i installation planning instructions and a list of components, download the *450 Platform User Guide* from: https://support.cambiumnetworks.com/files/pmp450i/

Important safety information

Warning

To prevent fire and explosions when installing or operating the AC+DC Enhanced Power Injector with radio products in hazardous locations, observe the instructions in this guide.

Checking labels

Only those products marked with the qualification label shown in Product labels on page 5 may be used as associated equipment with products in hazardous locations.

Special conditions

1. The AC + DC Enhanced Power Injector shall be used in non-hazardous indoor environments only.
2. The connections into the hazardous areas from the AC + DC Enhanced Power Injector to the ODU[1] or via the LPU[2] are at incendive energy levels and so shall be made using shielded cable that provides protection from mechanical impact and damage in accordance with EN/IEC 60079-14.
3. Connection and disconnection of terminals and plugs in the hazardous areas when the equipment is energised is strictly prohibited. Disconnect power input sources (AC-In, DC-In) and then the ODU output prior to Connection and disconnection of terminals and plugs in the hazardous areas.
4. Connection into hazardous areas using the DC out connector is strictly prohibited.

[1] ODU – Outdoor Unit, Point to Multipoint (PMP) or Point to Point (PTP) radio

[2] LPU – Lightning Protection Unit

Allowed operating envelope

The AC + DC Enhanced Power Injector has been certified for operation as an ATEX/HAZLOC associated apparatus. Approval is given by IECEx certificate number IECEx EMT 16.0029X and Atex certificate number EMT16ATEX0052X, issued by Element Materials Limited. The AC + DC Enhanced Power Injector is approved for use when installed with ATEX/HAZLOC compliant radio transmitting products installed in the following hazardous locations:

ATEX

The radio products that are intended for use with the AC + DC Enhanced Power Injector have been approved under an 'Intrinsic Safety' assessment as defined in EN/IEC 60079-11:2012, with the specific level of coverage shown below.

- II 3 G Ex ic IIC T4 Gc
- II - Equipment group (surface applications)
- 3 - Equipment category (infrequent exposure)
- G - Atmosphere (Gas)
- ic - Protection concept (intrinsic safety)
- IIC - Gas group (up to and including Hydrogen and Acetylene)
- T4 - Temperature class (135°C)
- Gc - Equipment Protection Level

HAZLOC

The radio products have been assessed and found compliant with the requirements of ANSI 12.12.01 and CSA C22.2 No. 213 for the following conditions.

The approval is given by MET Labs under File Reference E113068, with the specific level of coverage shown below.

- Complies with ANSI 12.12.01 and CSA C22.2 No. 213
- Class I - Gases, Vapors and Liquids (surface applications)
- Div – 2 (Infrequent Exposure)
- Gas Groups - A, B, C, D (up to and including Hydrogen and Acetylene)
- Operating Temperature Code - T4 (135°C)

Part numbers and product labels

Part numbers

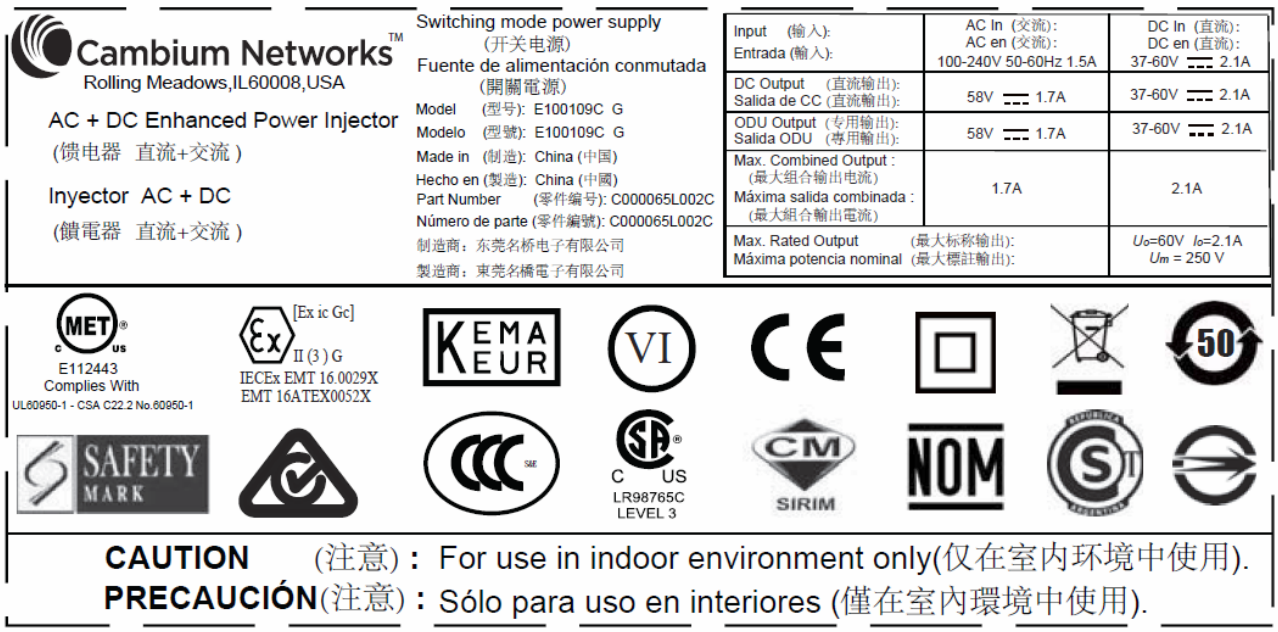
Associated apparatus (not approved for installation in the hazardous environment) are shown in Table 1 below.

Table 1 ATEX/HAZLOC associated apparatus part number

Part number	Description	Regional variant
C000065L002C	AC + DC Enhanced Power Injector	Global

Product labels

Figure 1 Certification label on AC + DC Enhanced Power Injector



Installation and operating requirements

Dielectric strength

The AC + DC Enhanced Power Injector complies with the dielectric strength test voltages of EN/IEC 60079-11:2012 section 6.3.13.

General requirements

ATEX regulatory environments

Installation should be in accordance with the requirements of EN/IEC 60079-14 as applicable.

HAZLOC regulatory environments

Installation should be in accordance with the National Electrical Code (NEC) and relevant OSHA standard.

Warnings

Before installing these products, read Important safety information on page 3.

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