Ramsey Electronics, Inc.
590 Fishers Station Drive
Victor, New York 14485
Phone: (585) 924-4560
Fax: (585) 924-4555
www.ramseytest.com

CIRCULAR UNIVERSAL IEC POWER INTERFACE

IEC25010C





Overview

The IEC25010C is an RF filtered universal AC power interface. This interface provides a convenient method of transferring AC mains power to an RF quiet environment by providing an exceptionally high level of RF filtering.

Applications

The primary application is for use in an RF Shielded Test Enclosure. The IEC25010C allows AC mains power to pass while maintaining an enclosure's RF isolation. The interface will also work well in RF Anechoic Chamber applications, RF Screen Room applications, or anywhere you need to pass AC power and maintain RF isolation.

Features

- Standardized IEC connectors to match up with virtually any country's power system.
- Rugged milled aluminum construction with electroless nickel plating for superior shielding and RF isolation.
- Wideband filtering operation, tested from DC to 40GHz.
- Greater than 80dB RF isolation.
- Rated to 250VAC.
- Safety fused at 10 Amps.
- Regulatory certifications which include EU CE, FCC, and Industry Canada.

Ramsey Electronics, Inc.
590 Fishers Station Drive
Victor, New York 14485
Phone: (585) 924-4560
Fax: (585) 924-4555
www.ramseytest.com

IEC25010C Interface Specifications

Unit Power Rating

Voltage:	100VAC to 250VAC
Current:	10 Amps Maximum, Fused at IEC 60320 C14 input connector
Phase:	Single phase
Frequency:	50/60 Hz

Electrical

Working Volts AC:	350VAC Maximum
Working Volts DC:	1000VDC Maximum
Dielectric Withstanding:	2000VDC
Insulation Resistance:	10G Ohms Minimum @ 25 degrees C (77 degrees F)
Ground Leakage Current:	115/120 VAC < 1 mA; 230/250 VAC <1.6 mA

Ports

Input Connector:	IEC60320 C14 Fused at 10 Amps
Output Connector:	IEC60320 C13
External Grounding:	Grounding Screw

RF Filtering

Capacitance:	5000pF Minimum
Filter Type:	PI
Insulation Resistance:	10G Ohms Minimum @ 25 degrees C (77 degrees F)
Insertion Loss, Typical:	> 80dB @ 1GHz @ 25 degrees C (77 degrees F), No load

Mechanical

Operating Temperature:	-25 to +70 degrees C (-13 to 158 degrees F)
Housing:	6061 milled aluminum, Electroless Nickel Plating
Flange Nut:	6061 milled aluminum, Class III Iridite
Mounting:	Flange nut with Monel wire mesh gasket on outside of enclosure
Recommended Cutout:	2.25 inches (57.2mm)
Socket Size:	2 5/8 inches (67mm)
External Dimensions:	3.2 inches (81.3mm) in diameter, 3.3 inches (83.8mm) long
Weight:	20oz (0.567kg)

RF Isolation (Conductive Insertion Loss All Lines):

DC to 200MHz:	Unspecified
200MHz to 30GHz:	>80dB typical
30GHz to 40GHz:	>70dB typical

Ramsey Electronics, Inc.
590 Fishers Station Drive
Victor, New York 14485
Phone: (585) 924-4560
Fax: (585) 924-4555
www.ramseytest.com

Included Power Cord *, Provided Standard, may be substituted for foreign use.

Description:	North American Power Cord
Ramsey Part Number:	PS86
Cord:	18 AWG x 3 (Black, White, Green)
Plug:	NEMA 5-15P
Connector:	IEC60320/C-13 Straight
Rated:	125VAC, 10 Amps
Length:	98 Inches (2.5 Meters)

*** Due to availability, included parts may be substituted without notice.**

Regulatory:

CE

EMC Directive: **2014/30/EU**

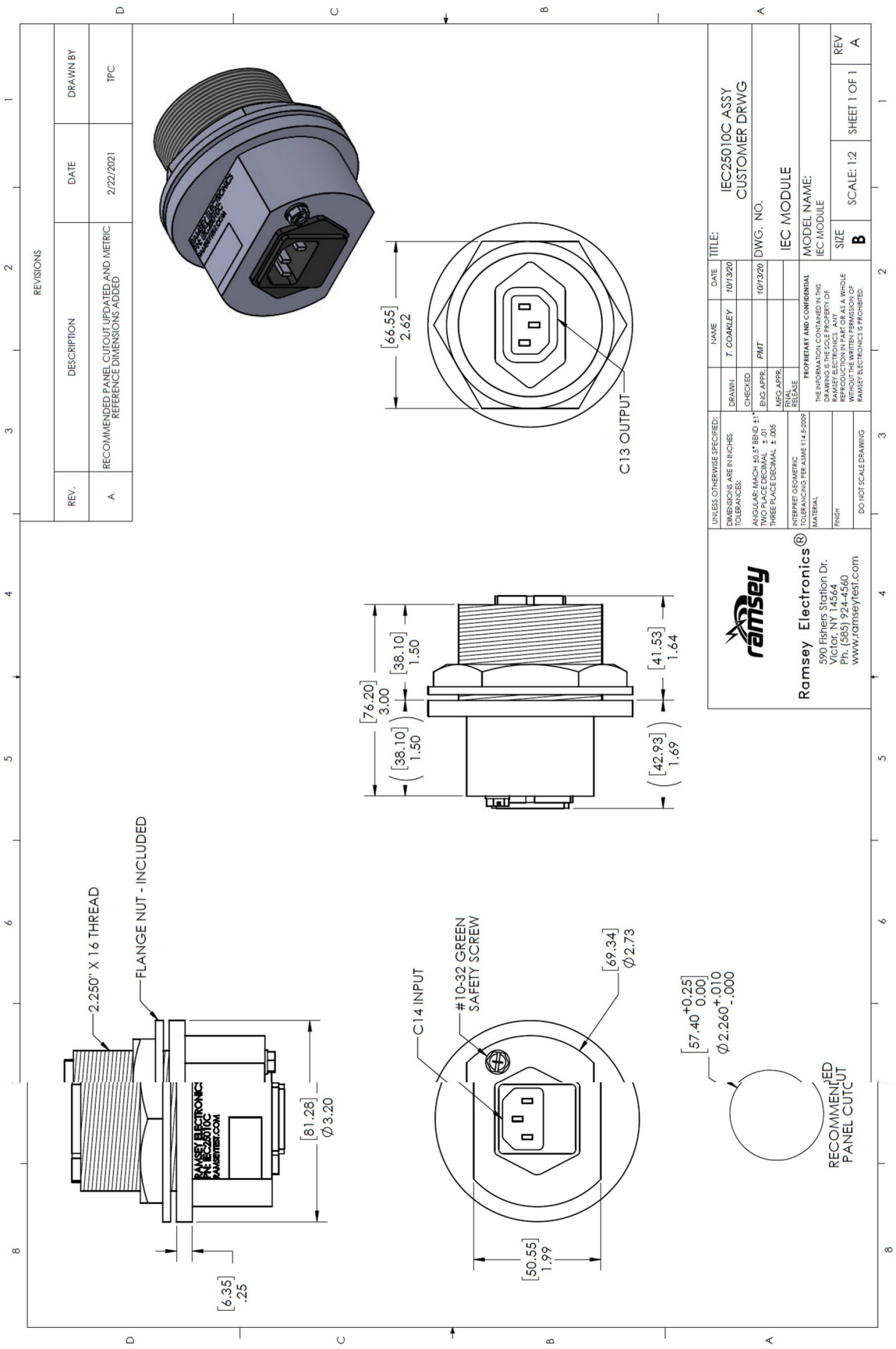
Standards: **CISPR 11:2009 + A1:2010 / EN 55011:2009 +A1:2010, Class A, Group 1**- Limits and methods of measurements of radio disturbance characteristics of industrial, scientific and medical (ISM) radio-frequency equipment

EN 61326-1:2013 - Electrical Equipment for Measurement, Control and Laboratory Use- EMC Requirements, Part 1: General Requirements.

CISPR 11:2009 + A1:2010 / EN 55011:2009 +A1:2010, Class B, Group1 - Industrial, Scientific and Medical Equipment

Industry Canada: **CAN ICES-3 (A)/NMB-3(A)**

FCC: **FCC Part 15, Subpart B - Class B** - Unintentional Radiators
This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:
1. this device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation



The information in this datasheet, although believed to be accurate, is not to be taken as warranty for which Ramsey Electronics assumes legal responsibility. Ramsey Electronics reserves the right to make changes, corrections, and improvements to its products and/or this document at anytime without notice.