



2.4GHz Radio Transceiver Product Specifications

CRT-2400 / CRT-2400CE* / CRT-2400-IPR / CRT-2400CE-IPR*

Overview

The Radio Transceiver (RT) houses a radio (2.4GHz) with corresponding antennas and serves as an access point, enabling RF communications with CrewCom Radio Packs. Using CrewNet as a backbone, RTs can be positioned throughout a wide coverage area by being connected to a Control Unit either directly or through a Hub(s), or connected in a daisy-chain configuration.

Key Features

- Supports up to 6 Normal Mode Radio Packs or 32 High Density Mode Radio Packs
- CrewNet connections (etherCon or duplex LC Single Mode Fiber) with network status indicators
- Status indicators for data RX/TX, operation mode, and error
- Easy expandability from one RT to up to seven additional RTs in a daisy chain via the RT Loop connection (total of eight)
- Micro USB connection for firmware updates
- Dual powering options
 - » Network power (Power over CrewNet)
 - » External power (48VDC) (sold separately)

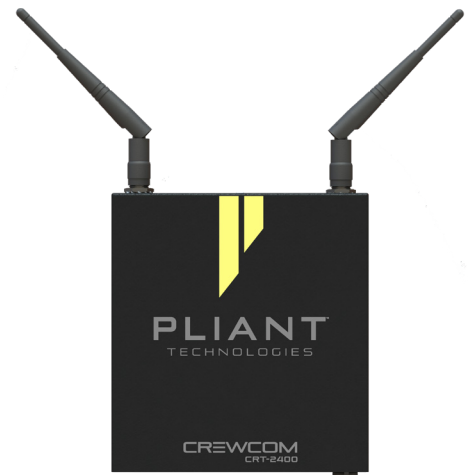
Specification***	CRT-2400 / CRT-2400CE/CRT-2400-IPR/ CRT-2400CE-IPR
RF Frequency (MHz)	2400–2483 MHz
RF Scheme	FHSS with TDMA
Effective Radiated Power	100 mW (+20dBm)
Receiver Sensitivity	-100dBm at 10 ⁻⁵ BER
Radio Certification	FCCID: HSW-CCT24 and IC: 4492A-CCT24
Transmission Range	150 m (500 ft.) under typical conditions; 450 m (1500 ft.) line of sight. Note: Functional range depends on many variables, including RF signal absorption, reflection, and external interference.
Number of Radio Packs Supported	6 (when RT in Normal mode) 32 (when RT in High Density mode)
Number of Antenna Connections per RT	2
Antenna Connector Type	RP-TNC
Supplied Antenna	+2dBi Omni-directional (whip)
CrewNet In Port (supports 1 connection)	(1) RJ-45 for copper; (1) duplex LC for Single Mode Fiber
RT Loop Port	(1) RJ-45
Maximum CrewNet Line Length	Copper 100 m (330 ft.); Fiber 10,000 m (32,800 ft.)
Network Power (Power over CrewNet)	CrewNet RJ-45 only
External Power	48VDC Power Supply (Sold Separately)
Dimensions without Antennas (L x W x H)	Non IPRTs: 6.30 in. x 7.74 in. x 1.81 in. (16 cm x 19.7 cm x 4.6 cm) IPRTs: 6.56 in x 7.19 in x 1.97 in (16.7 cm x 18.3cm x 5cm)
Weight	567 g (1.25 lbs)
Operating Environment	-20° to 50° C (-4° to 122° F); 10% to 90% Humidity
Maximum Altitude	2,000 m (6,562 ft.)
RoHS	Yes

What's in the Box?

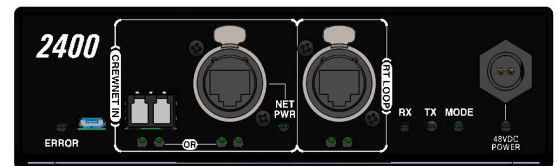
- CRT-2400 / CRT-2400CE Radio Transceiver
- CAB-USB6-CHG USB A to Micro B cable
- PC-CAT5-15BL Cat 5e cable, 4.6 m (15 ft.)
- 00003585 RT Flat Mounting Bracket
- 00003976 Single RT Adapter Mounting Bracket
- 00001339, 00003530, 00003683 Bracket Mounting Hardware
- PAC-ANT2-2DB0 Omni-Directional Antenna (x2)
- 00004021 Microphone Stand Adapter
- D0000286 Product Overview Guide
- D0000219 Warranty Extension Registration Card

Accessories

- TMA-ANTSYS-09C 2.4GHz 9dBi Directional Corner Reflector Antenna Kit
- PAN-CP24-KIT** 2.4GHz 12dBi CP Beam Antenna Kit
- PPS-48V 48VDC External Power Supply



CRT-2400 / CRT-2400CE*
2.4GHz Radio Transceiver
(Front View)



CRT-2400 / CRT-2400CE*
2.4GHz Radio Transceiver
(Bottom View)

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CE *The CRT-2400CE model meets the same specifications and complies with ETSI standards (300.328 v1.8.1). Non-CE models are non-compliant with some ETSI standards.
**PAN-CP24-KIT is not approved for use in Europe.

*** Notice About Specifications: While Pliant makes every attempt to maintain the accuracy of the information contained in this document, this information is subject to change without notice, and published device/system functions and features are subject to firmware version. Please check our website for the latest system specifications and certifications.

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