



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)

What's in the Box?

- CRT-2400 / CRT-2400CE / CRT-2400-IPR / CRT-2400CE-IPR
 - CAB-USB6-CHG
 - PC-CAT5-15BL
 - 00003585
 - 00003976
 - 00001339, 00003530, 00003683
 - PC-ANT2-2DB0
 - 00004021
 - D0000286
 - D0000219
- Radio Transceiver
USB A to Micro B cable
Cat 5e cable, 4.6 m (15 ft.)
RT Flat Mounting Bracket
Single RT Adapter Mounting Bracket
Bracket Mounting Hardware
Omni-Directional Antenna (x2)
Microphone Stand Adapter
Product Overview Guide
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
- 48VDC External Power Supply: PPS-48V for non-IP RT / PPS-48V-02 for IPRT

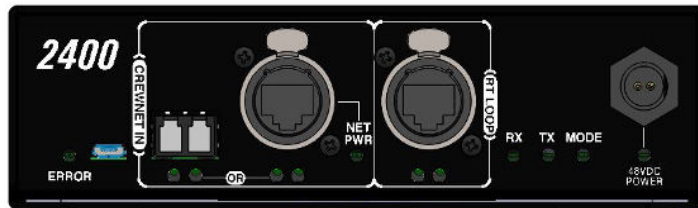
Specification***	CRT-2400 / CRT-2400CE	CRT-2400-IPR / CRT-2400CE-IPR
RF Frequency (MHz)	2400–2483 MHz	
RF Scheme	FHSS with TDMA	
Effective Radiated Power	100 mW (+20dBm)	
Receiver Sensitivity	-100dBm at 10 ⁻⁵ BER	
Radio Certification	FCCID: 2AX9C-CCT24 and IC: 30796-CCT24	
Transmission Range	150 m (500 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)	
	PPS-48V	PPS-48V-02
Dimensions without Antennas (L x W x H)	Non IPRTs: 6.30 in. × 7.74 in. × 1.81 in. (16 cm × 19.7 cm × 4.6 cm)	IPRTs: 6.50 in. × 7.74 in. × 1.89 in. (16.5 cm × 19.7 cm × 4.8 cm)
Weight with Antennas	650 g (1.43 lbs)	532 g (1.17 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	
IP Rating	N/A	IP65
Compliance Model Number	RT2505	



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



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



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



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

Pliant Technologies, LLC
CrewCom®
205 Technology Parkway
Auburn, Alabama 36830 USA
www.plianttechnologies.com
Phone +1.334.321.1160
Toll-Free 1.844.475.4268 or 1.844.4PLIANT
Fax +1.334.321.1162

CE *The CRT-2400CE and CRT-2400CE-IPR models meet the same specifications and comply 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.

Copyright ©2018-2024 Pliant Technologies, LLC. All rights reserved. The Pliant® and CrewCom® word marks and the Pliant "P" logo are registered trademarks of Pliant Technologies, LLC. The SmartBoom® word mark is a trademark of CoachComm LLC. All other trademarks are property of their respective owners.

CRT-2400_DATASHEET_5.28.2024

CREWCOM
BY PLIANT