900MHz* Radio Transceiver Product Specifications
CRT-900 / CRT-900AN**

Overview
The Radio Transceiver (RT) houses a radio (900MHz) 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 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
- Integrated Ping function, which uses an LED to physically identify a target device
- Dual powering options
  - » Network power (Power-over-CrewNet)
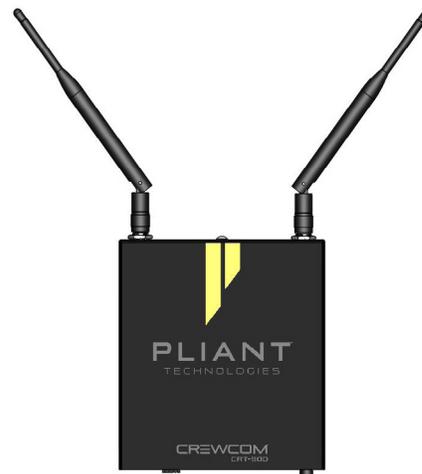 - » External power (48VDC) (sold separately)

What's in the Box?
- CRT-900 / CRT-900AN   Radio Transceiver
- 00003402   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
- 00001693   Omni-Directional Antenna (x2)
- 00004021   Microphone Stand Adapter
- D0000286   Product Overview Guide
- D0000219   Warranty Extension Registration Card

Accessories
- PC-ANT-DIR906   900MHz 6 dBi Yagi Directional Antenna
- PAN-YA906-KIT   900MHz 6 dBi Yagi Directional Antenna Kit
- PPS-48V   48VDC External Power Supply

Specification***	CRT-900
RF Frequency (MHz)	902–928 MHz (915–928 MHz)**
RF Scheme	FHSS with TDMA
Effective Radiated Power	400 mW (+26 dBm)
Receiver Sensitivity	-100dBm at 10^{-5} BER
Radio Certification	FCCID: HSW-CCT900 and IC: 4492A-CCT900
Transmission Range	200 m (approx. 650 ft.) under typical conditions; 600 m (approx. 1950 ft.) line of sight. Note: Functional range depends on many variables, including RF signal absorption, reflection, and external interference.
Number of Radio Packs Supported (when RT in Normal mode)	6
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, PPS-48V (Sold Separately)
Dimensions without Antennas (L x W x H)	16 cm × 19.7 cm × 4.6 cm (6.30 in. × 7.74 in. × 1.81 in.)
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
Compliance Model Number	RT2505

*900MHz products only available in North America, Australia, and New Zealand.
**The CRT-900AN (Oceania) model is approved for use in Australia and New Zealand and operates within the 915–928 MHz frequency range.

CRT-900
900MHz Radio Transceiver
(Front View)

CRT-900
900MHz Radio Transceiver
(Bottom View)

*** 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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