

DRT1201C and DRT1202C



DESCRIPTION

The DRT1201C provides a compact, yet powerful, collection capability against Push-to-Talk (PTT) signals. The system is based on an industry-standard bus format, and uses the latest digital signal processing (DSP), RF, and microprocessor technology. The DRT1201C supports a full complement of third generation modules.

DRT1202C – DC powered-version of the DRT1201C. Same features and accessories, but DC power input replaces AC power input. AC/DC adapter included.

- Monitors up to 816 half-duplex channels (up to 48 channels per WPM3A).
- Software configurable.
- DF option available.
- Flexible tuner configuration provides frequency coverage of all bands of interest.
 - RFT3A-40 (Standard): Dual channel transceiver VHF/UHF coverage from 20 – 3000 MHz; HF from 0.5 – 32 MHz
 - RFT4 (Optional): Dual channel transceiver VHF/UHF coverage from 20 – 6500 MHz; HF from 0.5 – 32 MHz
 - HFT1B (Optional): High performance HF receiver from 0.2 – 32 MHz
- FPGA based Wireless Processor, WPM3A, enables wideband signal processing.
- Auto-configuration mode facilitates setup of unit.
- Timestamped wideband and narrowband data.
- 1PPS Sync Signal Input/Output.
- 10 MHz Reference Signal Input/Output.
- Built-in GPS receiver.
- Eighteen slots are available for any combination of tuners or WPM3As. A non-blocking switch routes the Digitized IF (DIF) Data from any slot to any other slot. Up to eight DIF channels into a WPM3A.
- Small size and low power.
- User-friendly Graphical User Interface (GUI).
- Supports target lists with up to 10,000 entries.
- Controlled from PC using *Windows XP* or *Windows 7* via Ethernet interface.
- 16 half-duplex conversations can be recorded on internal disk drive or other networked devices. E1 output optional. Stereo headphone output directly from receiver or headphone output can be streamed to a PC.
- Integrated spectrum analysis tool.

Specifications

Total Number of Slots for Tuners and Wireless Processor Modules (WPMs): 18

Maximum Number of Tuners: 18 (36 RF Channels)

Maximum Number of WPMs: 18

Maximum Number of Channels:
816 (half-duplex)

Frequency Coverage:

0.5 MHz – 3000 MHz (Standard, with RFT3)

0.5 MHz – 6500 MHz (Optional, with RFT4)

0.2 MHz – 32 MHz (Optional, with HFT1B)

Audio Outputs:

16-Channel Digital Recorder

Stereo Headphones

Streaming Data Service (SDS)

E1 Audio (Optional)

RIM (Optional)

IQ Data Streaming: Via SDS over TCP/IP

System Software:

DRT1000 System Software

Windows XP Operating System

Compatible with:

Controller PC running: *Windows XP* or *Windows 7*

Dimensions: 19 in. rack mountable x 4U High

Height: 4U - 7.0 in. (17.78 cm) without feet (feet are 5/8 in. (1.59 cm) tall and can be removed for rack mounting)

Width of Basic Body without Slides: 17.34 in. (44.04 cm) wide

Minimum overall depth with front handles detached and rear handles folded: 18.90 in. (48 cm)

Front handles add 1.75 in. (4.45 cm); unfolding rear handles adds 0.94 in. (0.24 cm)

Weight: Typical weight: 69.3 lbs. (31.2 kg)
(6 RFT3A-40s, 12 WPM3As)

Weight varies with the number and type of modules installed. Chassis with System Controller and Reference Generator modules weighs 41 lbs (18.5 kg). See specific module data sheets for weights of additional modules.

Operating Temperature (Ambient):

-20°C to +60°C (-4°F to +140°F)

Power Consumption:

879 W – Fully loaded (6 RFT3A-40s, 12 WPM3As)

1143 W – Max

Power Required:

DRT1201C: 100 – 240 VAC, 50 – 60 Hz;
 110 – 130 VAC, 400 Hz
 DRT1202C: 22-36 VDC

Control Interface: Gigabit Ethernet

SRI Output Interfaces:

RS-232
 Ethernet
 E1 Timeslot (Optional)

Standard system ships with:

- Receiver with custom Tuner/WPM configuration
- User-friendly software with online help
- Integrated Spectral Display Unit (SDU)
- Ethernet crossover cable
- Stereo Headphones
- Omni-directional antenna with magnetic mount and coaxial cable
- REF3 GPS Antenna
- 128 GB Solid-State Drive (Non-Zeroize)

Options:

- Fully configured Laptop PC (Office or Ruggedized Model) – including installed Ethernet card
- WLAN Control Interface
- 19" Rack Slides
- Direction Finding (DF)

Drives:

- Zeroize capable and Non-Zeroize capable system drives are available in various sizes. Contact DRT for latest list.
- Volatile Memory Option (VMO) Drive

Modules:

- CTL28 - System Controller Module
- GPPx - General Purpose Processor
- ES5P - Ethernet Switch 5 Port
- E1C 4-port - Audio Output Module
- DIM1B - Digital Interface Module for output/playback of wideband spectrum with external digital recorder
- RIM1C – Recorder Interface Module
- RFT4 - Wideband Tuner
- HFT1B - HF Tuner
- DEL1 - Delay Module
- 10GigE (Future)
- Quad Tuner (Future)

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