



New HP Series DTX+ HP Transceiver

900 MHz

FEATURES

- High Power Capability 5-30 Watts
- Narrow Band (12.5 kHz)
- DSP audio processing for cleaner transmission
- Frequency Stability Standard @ 1.0 ppm
- Ultra-Fast TX/RX Attack Times
- Controlled Envelopesm TX Keying
- Dual Transmit and Receive Audio Paths
- Meets FCC and IC (Canada) Standards*
- Programmable Output Power
- SMD Component Design
- Designed and Manufactured in the USA



DTX+ HP ATCS 900 MHz Railroad Transceiver

The DTX+HP ATCS 900 MHz Railroad Transceiver is designed to drop into existing ATCS wayside radio slots in order to allow continued operation of the system without a complete and costly redesign due to an obsolete radio platform.

Direct modulation with low distortion and low group delay result in a low bit-error-rate (BER) for enhanced system integrity and reliability. The Swift Locksm synthesizer-loading algorithm reduces unit turn-on-time to less than 10ms for high-speed data throughput rates, and Controlled Envelopesm keying reduces adjacent channel "keyclicks", resulting in spectrum-friendly operation. In addition, a Receive Signal Strength Indicator (RSSI) signal is brought out on the external I/O connector to maintain compatibility with existing systems.

For high performance, reliable and cost-effective wireless data solutions, call Ritron at **800.USA.1.USA** (800-872-1872).

* FCC and Industry Canada Approval Pending. This device is not, and may not be, offered for sale or lease, or sold or leased until approval by the FCC has been obtained.

**Need an all-in-one radio
and relay control solution?**

Ask about the TeleSwitch® HP



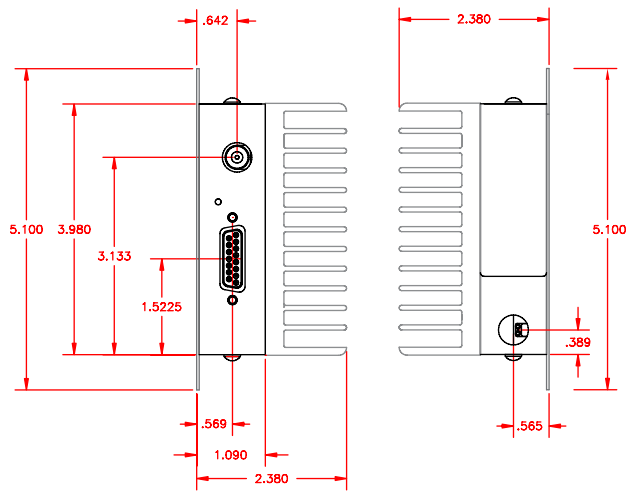
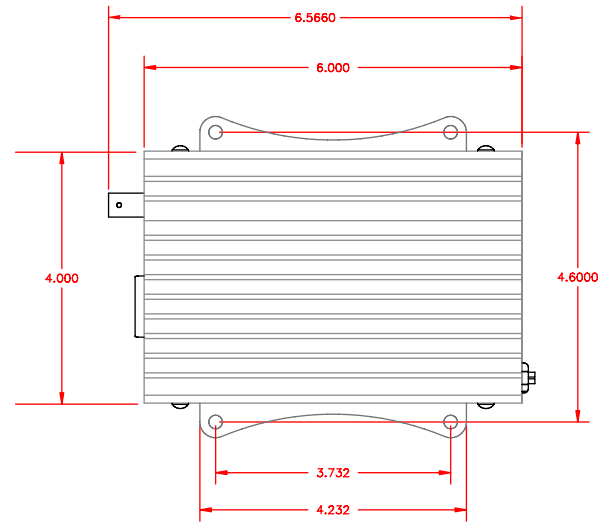
DTX+ HP SPECIFICATIONS MODEL NUMBER: DTX-965-0BN30I

GENERAL		
FCC Identifier	PENDING	
Industry Canada Identifier	PENDING	
Number of Channels	6	
Mode of Operation	Simplex/Half Duplex	
Frequencies (MHz)		
Channel	Transmit	Receive
1	896.8875	935.8875
2	896.9375	935.9375
3	896.9875	935.9875
4	897.8875	936.8875
5	897.9375	936.9375
6	897.9875	936.9875
Channel Increment (Synthesizer step size)	12.5 kHz	
Channel Bandwidth	12.5 kHz	
Emissions Bandwidth	11 kHz	
Frequency Stability		
(-30° to +60° C)	1.0 ppm	
(-30° to +65° C)	1.5 ppm	
Supply Voltage (VDC)	11-16	
RF Input/Output Connector	BNC	
I/O Connector	15 pin sub D	
Operating Temperature	-30° to +65° C	
Maximum Dimensions (L x W x H)	6.56" x 5.1" x 2.38" (16.7 cm x 13 cm x 6 cm)	
Weight	33 oz (0.93 kg)	
Power Interface	2 pin Molex	
TRANSMITTER		
RF Output Power	5-30 watts	
Duty Cycle @ 25° C		
@ 30 Watts	35%	
@ 15 Watts	50%	
Max. Key-Down Time	6 minutes	
RF Load Impedance	50 ohms	
Transmitter Attack Time:	<10 ms	
Spurious and Harmonics:	<-25 dBm	
FM Hum and Noise		
12.5 kHz channel operation	>45 dB	
Current Drain@12VDC		
5 watt	<4.0 A	
15 watt	<6.5 A	
30 watt	<9.0 A	
RECEIVER		
Sensitivity (12 dB SINAD)		
w de-emphasis	<0.27 µV	
w/o de-emphasis	<0.35 µV	
RF Input Impedance	50 ohms	
Adjacent Channel Selectivity	>60 dB	
Spurious and Image Rejection	>70 dB	
Intermodulation Rejection	>67 dB	
FM Hum and Noise	>45 dB	
Conducted Spurious	<-57 dBm	
Receive Attack Time	<10 ms	
Squelch/RSSI Attack Time	<5 ms	
Receive Current Drain	<140 mA	

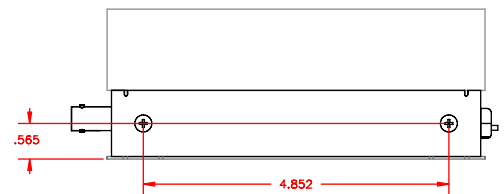
Specifications subject to change without notice.

Founded in 1977, Ritron, Inc. specializes in the design and manufacture of industrial-grade wireless voice and data communication equipment.

RF and CONTROL BOARD MODULE



RF BOARD MODULE ONLY



DTX PLUS INPUT/OUTPUT CONNECTORS

PIN #	Name	Description
1	CS0	Channel Select low bit
2	CS1	Channel Select mid bit
3	CS2	Channel Select high bit
4	MIC IN	Microphone Input
5	CSN	High/Low Power or Channel 1/2
6	RSSI	
7	AUX IN	Auxiliary Input
8	AUX OUT	Auxiliary Output
9	PGN IN/OUT	Programming I/O
10	CTS	Clear to Send
11	RX MON	Monitor
12	AUDIO OUT	Audio PA Output
13	DCD	Carrier Detect
14	PTT RTS	Push-to-Talk
15	GND	Ground

Go Beyond Normal Limits...™



505 West Carmel Drive, Carmel, IN 46082 • PH: 317-846-1201 • FX: 317-846-4978

email: sales_info@ritron.com • website: www.ritron.com

© 2016 Ritron, Inc. All rights reserved. Ritron is a trademark of Ritron.