

Multiband Range Telemetry Receiver WREC-2111/2112/2112C

Features

- 4U Quad Receiver Combiner System
- Multiband Coverage
 - E/S Band 2185 – 2485 MHz
 - L Bands 1429 – 1545, 1700 – 1850 MHz
 - P Band 215-320 MHz
 - C Band 4400-4940, 5091-5150 MHz
- Single, Dual, Quad Receivers
- Independent Tuners and Demodulators
- Independent AM/AGC Tracking outputs
- Digital Predetection Diversity Combiners
- Automatic Best Source Selection
- Digital Multimode Demodulators
- ARTM Tiers I and II Phase Noise Compliant
- Touch Screen LCD Display



- Dual Redundant 500W Power Supplies
- Remote Control and Network Support
- Bit Synchronizer Option
- Programmable IF to Tape Output Option
- RF Signal Generator Option
- CH 10 PCM Data Recording Option

Wyle Telemetry and Data Systems Model WREC-2111/2112/2112C Multiband Telemetry Receiver systems offer an affordable high performance solution for today's advanced telemetry receiver applications. These multichannel, multiband telemetry receiver systems combine high performance telemetry receivers with predetection diversity combiners and DSP based multimode demodulators. Standard configurations are available with single, dual, or quad independently tunable receivers, with or without diversity combiners. Each TDS Receiver or Combiner provides a separate multimode demodulator with dual outputs per channel. The front panel GUI provides independent control of each Receiver or Combiner function and includes a spectral and baseband video display of each channel. Most WREC Telemetry Receiver options can be field installed by users as they require additional performance, new features, and extended capabilities. This is especially useful and economical as the need for future requirements develops.

Standard Features Include:

- Multiband or Single Band Receivers:
 - 215-320, 1429-1545, 1700-1850, 2185-2485, 4400-4940, 5091-5150 MHz
- Dual use Data Receiver/Tracking Receiver
 - Independent AM and AGC outputs for use with auto tracking antenna systems.
- Digital Multimode Demodulators
 - Standard demodulation suite includes FM/PM/BPSK/AM.
 - Optional demodulation suites include FM/PM/BPSK/QPSK/AM and FM/SOQPSK/AM.
 - Additional demodulation suites can be custom configured. Contact with us with your requirements.
- Digital IF Filtering from 50 kHz to 30 MHz Including 12 IRIG Standard IF Filters Selections
- Digital Predetection Diversity Combiners with Multimode Demodulator.
 - Predetection diversity combiner with optimal ratio combining or automatic best source selection.
- Integrated Spectral Display and Baseband Video Display
- Local control via touch screen display and remote control client application using standard Ethernet

Receivers	Frequency Range	P-Band 215 – 325 MHz Lower-L Band 1429 – 1545 MHz Upper-L Band 1700 – 1850 MHz S-Band 2185 – 2485 MHz C-Band 4400– 4940, 5091– 5150 MHz <i>Others are available.*</i>
Demodulators	Types	FM, PM, BPSK, and AM standard QPSK, ARTM Tiers I and Tier II options also available
	Data Rates	PCM/FM performance 20 Mbps BPSK/QPSK performance 20 Mbps PM performance 20 MHz
Combiners	Modes	Predetect Optimal Ratio Combiner Automatic Best Source Selection
Inputs	RF input	SMA, one RF input per Receiver channel
Outputs	Down converted IF	BNC, one 70 MHz IF output per Receiver channel
	Demodulator Output	BNC, dual independent video outputs per Receiver channel and Combiner
	AM	One AM output per Receiver channel and Combiner. Available on antenna control connector via BNC with included cable assembly.
	AGC	One AGC output per Receiver channel and Combiner. Available on antenna control connector via BNC with included cable assembly.
	COR	BNC, one carrier on relay output per receiver channel
	Combiner Lock	BNC, one Combiner lock output per Combiner
	Bit Sync	One Bit Sync data, clock, and lock Indicator output per Receiver channel and Combiner. Available on Bit Sync connector via BNC connector with included cable assembly. Requires Bit Sync option.
	Tape Output	BNC, one IF to Tape output per Receiver channel and Combiner. Requires IF for Tape option.

**For additional Receiver and Combiner specification details, refer to PCI Multiband Receiver and Diversity Combiner specifications.*

Chassis	Description	Custom Rugged 4U design
	Power	Dual redundant , 500W power supplies
	Display	8.4-inch LCD, 800 x 600 VGA, with Touch screen
	LAN	Ethernet , Dual 1000-Base-T
	USB	5, USB 2.0.
	Media	320G SATA II Hard Disk and DVD RW/CD
Environment	Temperature	Operational : +5 °C to +40 °C, Storage: -20 °C to +85 °C
	Humidity	10%-90%, non-condensing
	Altitude	0 to 10,000 feet

Ordering Codes	WREC-210X-YC	Diversity Receiver Chassis, X Tri Band Receiver, Y Div Combiner, FM/PM/BPSK/QPSK/AM
	WREC-2112C-101	Diversity Receiver Chassis, Two Tri Band Receiver, One Diversity Combiner, 1 Digital Demodulator
	WREC-2112C-301	Diversity Receiver Chassis, Two Tri Band Receiver, One Diversity Combiner, 3 Digital Demodulators
	WREC-2111M-101	Receiver Chassis, Single Tri Band Receiver w/FM/PM/BPSK/QPSK/AM
	WREC-2112M-101	Receiver Chassis, Two Tri Band Receivers w/FM/PM/BPSK/QPSK/AM
	WREC-2112T-201	Receiver Chassis, Two Tri Band Tracking Receivers AM/AGC
	WREC-FWBS-001	WREC Receiver Firmware Bit Sync Option

**Please contact Wyle Telemetry and Data Systems for additional information or for custom Receiver configurations. **

All specifications subject to change without notice.