

Lumistar LS-28-DRSM Series Modular Receiver/Combiner

From Ether to Ethernet

This is Lumistar's newest most compact and capable telemetry receiver. The LS-28-DRSM Series is designed specifically to support Flight Test and Space Telemetry Ops.



LS-28-DRSM Series Receiver/Combiner Features:

- Ideal for Fixed Ground, Mobile, Airborne and Remote Applications
 - Ideal for Integration into Tracking Antenna Pedestal
- Modular Configuration
 - About the Size of a Hard Drive!
- Dual Channel - up to Six Band Receiving and Diversity Combining Functions
 - 200 MHz to 7 GHz
- RF to Ethernet UDP Data Packet Option in a Single Handheld Unit
 - IRIG-218 or CH10
 - CCSDS Optional
 - Giga Bit Ethernet Data Independent of Traditional Bit Sync Outputs
- RF to Traditional Bit Sync Clock/Data
 - TTL and Differential High Speed 422 *Simultaneously*
- Multi-Mode Demod Formats
 - Digital PCM/FM, Analog FM, SOQPSK, Multi-H CPM, BPSK, QPSK, OQPSK, AUQPSK, PCM/PM, Subcarrier, NTSC and PAL de-emphasis
 - Data rates to 60 Mbps
 - Supports analog FM and NTSC/PAL video

- Three 70 MHz IF Outputs
 - CH1/CH2 and Combined
- Three Independent Bit Syncs
 - For CH1/CH2 and Combined
- Decom Option (future)



Lumistar LS-28-DRSM Series Modular Receiver/Combiner

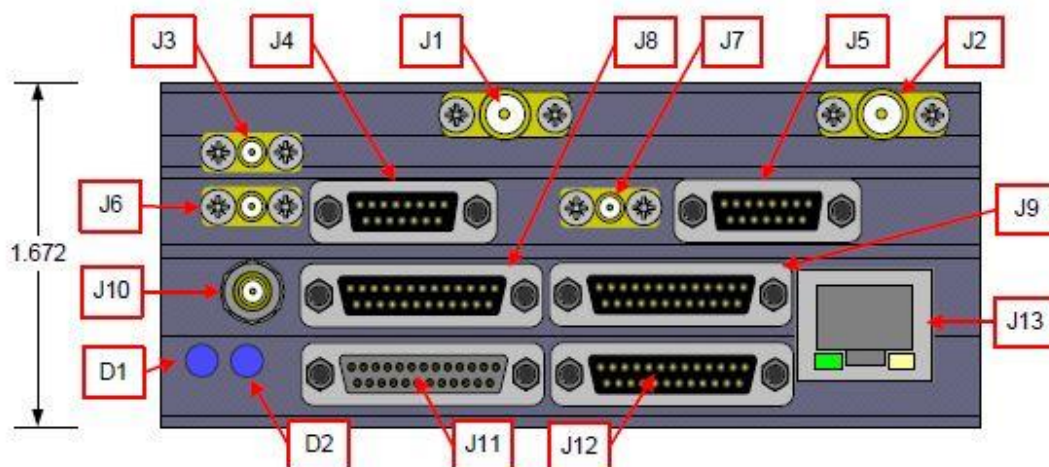
From Ether to Ethernet

- **Data Recording and Playback Option**
 - 64 GB per data channel
 - CH1/CH2 and Combined
- **4 dB Noise Figure, 120 dB Dynamic Range**
- **+10 dBm Operational, +30 dBm Non-Damage**
- **Spectral Displays**
- **Oscope Displays**
- **Bit Error Rate Reader**
- **Test Signal Generation**
 - Excellent for Loop Back Tests
 - Internally Generated Data Patterns
 - Internal PRN Data and User Defined Frame Patterns
 - Future Expansion to 70 MHz Modulator
 - With Doppler Shift Feature
 - With User Defined Multipath Simulation Feature
- **Up to 22 User Defined I/O Pins**
 - Allows Monitoring User Defined Conditions
- **Independent Dual Channel Antenna Tracking Receiver Function**
 - User Programmable AGC outputs
 - Extremely Linear
 - User Programmable and Lowpass Filtered AM outputs
- **Data IF Bandwidth Resolution 10 KHz**
 - Bandwidth Selections <50 KHz to 40 MHz
- **No OS**
 - Control / Status over USB, 232 or Ethernet
 - Serial Control/Status is Independent of Ethernet Control/Status
- **IRIG Time Inputs for Time Stamp of Ethernet Data Packets**
- **Small Size and Weight**
 - 6.00" x 4.00" x 1.66"
 - Under 1 kg
 - Perfect for integration in to Antenna Pedestal or Feed
 - Can Be Integrated in to Rack Mounted Chassis Configurations
 - Dual/Quad Channels or more
- **Single Rail Power Supply**
 - +9 to +42 VDC Operation
 - 40 watts typical, mode dependent
- **Please See Data Sheet, SCD, ICD, Quick Start Guide and User Manual for more technical information**



Lumistar LS-28-DRSM Series Modular Receiver/Combiner
From Ether to Ethernet

Front View



Designator	Style	Signal Description
J1	SMA-F	Channel 1 RF/IF Input
J2	SMA-F	Channel 2 RF/IF Input
J3	SMB-M	10MHz Reference Input/Output
J4	uDSUB15	Channel 1 Analog I/O (AM, AGC, Video, BSync In)
J5	uDSUB15	Channel 2 Analog I/O (AM, AGC, Video, BSync In)
J6	SMB-M	Channel 1 70MHz IF Out Linear/DAGC
J7	SMB-M	Channel 2 70MHz IF Out Linear/DAGC
J8	uDSUB25	Channel 1 Digital I/O
J9	uDSUB25	Channel 2 Digital I/O
J10	SMB-M	IF Modulator Output
J11	uDSUB25	Combiner Digital I/O (Power)
J12	uDSUB25	User Digital I/O
J13	RJ45	Ethernet Control/Status/Data Interface
D1	Multi Color LED	Channel 1 Status LED
D2	Multi Color LED	Channel 2 Status LED

Updated 5-2017



Lumistar LS-28-DRSM Series Modular Receiver/Combiner

From Ether to Ethernet

Typical GUI Examples (2 of 14 screen selections)

