

LUMISTAR

LS-84-R4L 4U Rack Mount Receiver

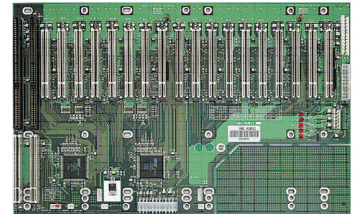
Data Sheet

The Lumistar LS-84-R4L 4U Rack Mount Data Unit offers a low cost, high performance, COTS telemetry ground station solution integrating a large number of receivers, bit synchronizers, and multifunction decoms in a single 4U high rack mount chassis. Systems requiring a large number of receivers or combiners in a small space. This design incorporates a Pentium 4 Single Board Computer (SBC) and a Passive Backplane allowing a system to be created using any of the Lumistar PCI receiver or display products.



Lumistar also offers the several other chassis configurations for applications that require a lesser number of boards.

This system is bundled with setup, control, and monitoring software with spectral and oscilloscope display (optional). Please refer to the individual data sheets for performance of the Lumistar board products used in this system.



Lumistar PCI Components for LS-84-R4L

The following products can be installed in the LS-84-R4 resulting in an extremely sophisticated telemetry data monitoring system in a portable computer.

FM Receivers:

- LS-25 Multi-band FM Receiver with up to 12 IF Bandwidths/12 Video Filters

Multi-mode Receivers (for FM, PM, BPSK, QPSK, OQPSK, SOQPSK, AQPSK):

- LS-25-D2 Multi-band Down Converter with LS-32-R Multi-mode IF Receiver With 23 IF Bandwidths, 16 Video Filters, bit sync and decom optional

ARTM Receiver

- LS-25-D2 Multi-band Down Converter with LS-58-M Multi-mode Demodulator (For ARTM Tier 0, Tier I, and Tier II)

Diversity Combiner

- LS-33 Dual IF Receiver with Pre&Post-D Diversity Combiner and Multi-mode Demod with bit sync and decom optional

Spectral and Oscilloscope Display

- LS-22-SE Spectral and Oscilloscope Display - up to 3 channels

Bit Synchronizers:

- LS-40-DB Bit Synchronizer Daughterboard
- Bit Synchronizer firmware option in all multi-mode demodulators

Multi-function Decoms:

- LS-50 PCI Multi-function PCM Decom or integral with multi-mode demodulators
- Decom firmware option in multi-mode demodulators

D/A Converters:

- LS-71-P16 16-Channel or P32 32-Channel D/A Converter

Command Data Simulator with FM Modulator

- LS-70-F Command Data Simulator with FM Modulator Option
- LS-70-M Command Data Simulator with ARTM Multi-mode Modulator Option

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SPECIFICATIONS:

Please refer to the individual data sheets for performance specifications of the Lumistar board products that can be used the LS-84-R4L.

Computer Specifications:

Computer specifications are continually changing with technology improvements. A minimum configuration as of this date would include:

- Passive Backplane with Pentium 4 SBC, LAN and USB 2.0
- Intel Pentium 4 CPU: 2.4 GHz with 1MB cache and 533 MHz Front Side Bus
- CPU fan for Pentium processor
- Multiple fans for board cooling
- Memory: 2GB RAM
- Power Supply: 460watt, Auto-sensing 110/220 V, 50/60 Hz
- HDD: 200 GB
- DVDRW
- USB
- Windows XP

Environmental:

Operating Temperature	10° to +40° C
Non-Operating Temperature	-25° to +70° C
Operating Humidity	0 to 90% (Non-condensing)
Non-Operating Humidity	Protect from moisture and contamination

Physical:

Size	19" W x 22" D x 7" H
Weight	55 Lbs (25 Kg) typical
Power Supply	115 V/230 V Auto-sensing

Optional Features:

Remote Control
Rack Mount Slides
1U Keyboard/Display