

LUMISTAR

LS-84-R4 4U Rack Mount Data Unit

Data Sheet

The Lumistar LS-84-R4 4U Rack Mount Data Unit offers a low cost, high performance, COTS telemetry ground station solution integrating receivers, bit synchronizers, and multifunction decoms in a single 4U high rack mount chassis. This design incorporates a Pentium 4 motherboard with high end graphics and 6 PCI slots for integration using any of the Lumistar products.

Lumistar also offers the LS-84-RM1 (1U) and the LS-84-2U (2U) Rack Mount Data Units for applications that do not require as many PCI boards to be installed. Other 4U computers are available with passive backplane, Single Board Computer (SBC) with up to 18 slots allowing large multi-stream systems to be created using standard Lumistar PCI boards. The optional 1U Keyboard Display is shown.



Lumistar PCI Components for LS-84-R4:

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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LS-24-R4 Rack Mount Data Unit Data Sheet

SPECIFICATIONS:

Please refer to the individual data sheets for performance specifications of the Lumistar board products that can be used the LS-84-R4.

Computer Specifications:

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

- Intel Pentium 4 Motherboard with LAN and USB 2.0
- Intel Pentium 4 CPU: 3.0GHz with 1MB cache and 800MHz Front Side Bus
- CPU fan for Pentium processor
- Multiple fans for board cooling
- AGP video card with 128MB video memory
- Memory 1GB RAM
- Power Supply PS2 460 watt, Auto-sensing 110/220 V, 50/60 Hz
- Removable HDD 200GB
- 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, 50/60 Hz Auto-sensing

Optional Features:

Remote Control	TCP/IP
Rack Mount Slides	
1U Keyboard/Display	