

# LUMISTAR

## LS-84-R1 1U Rack Mount Data Unit

### Data Sheet

The Lumistar LS-84-R1 1U 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 1U high rack mount chassis. This design incorporates a butterfly backplane with a Single Board Computer (SBC) on one side and 2 PCI slots on the other allowing a system to be created using any of the Lumistar products.



Lumistar also offers the LS-84-R2 2U Rack Mount Data Unit and the LS-84-R4 Rack Mount Data Unit for applications that require more PCI boards. The optional 1U Keyboard Display is shown.



### Lumistar PCI Components for LS-84-R1:

The following products can be installed in the LS-84-R1 resulting in an extremely sophisticated telemetry data monitoring system in a 1U rack mount system.

#### 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

# LS-24-R1 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-R1.

### Computer Specifications:

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

- Butterfly 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: 1GB RAM
- Power Supply: 250watt, Auto-sensing 110/220 V, 50/60 Hz
- HDD: 40 GB
- DVDRW
- USB
- Windows 2000-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 21" D x 1.75" H
Weight	20 Lbs (9 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	