

LUMISTAR

LS-26-PR Portable Data Receiver with Optional Bit Synchronizer Data Sheet

Description:

The Lumistar Portable Receiver with Bit Synchronizer was created for customers that require an extremely high performance wide-band receiver and bit synchronizer in a portable self-contained package.



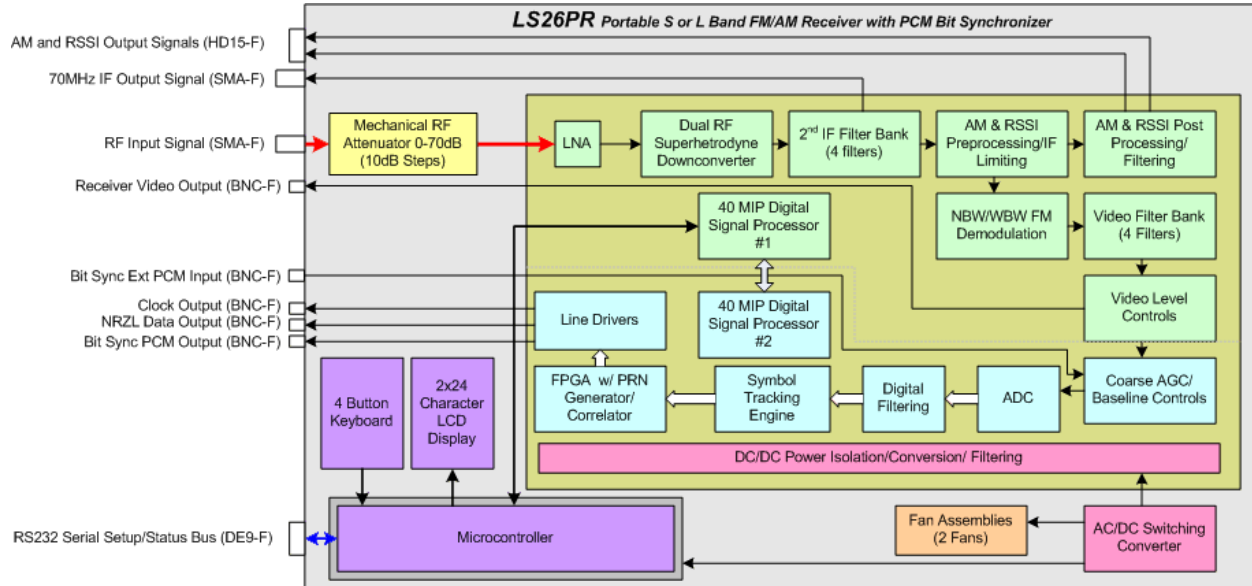
The receiver design incorporated in this system is based on the second generation Lumistar LS-25-P2 receiver resulting in performance typically encountered in a high quality ground station receiver and the internal bit synchronizer is the digital LS-40-DB20.

The unit is packaged in a small Zero case with an input attenuator, internal keypad and display, universal AC power supply and cooling fans for the system. The internal microcontroller operates the complete system and allows the unit to be programmed through an RS-232 Serial Port. Windows compatible software is provided for installation on a remote computer.

Key Features:

- Single Band available in P, Lower-L, Upper-L, S, or NATO E-Band
- SMA Type Connector for signal input
- Small antenna is available as an option
- 70 dB Rotary Attenuator on the input (10dB steps)
- 4 selectable IF Bandwidths (specify on order)
- Data Rates to 20 Mbps
- 70 MHz Output on SMB for spectral monitoring or remote demodulation
- Video Output directly from receiver
- Bit Sync Data and Clock Outputs from Bit Synchronizer
- Bit Sync Output with Programmable PCM Code
- External Bit Synchronizer input allows use as a bit sync only
- AM Output for auto-tracking
- Signal Strength Output
- Programmable through RS-232
- Local control and display
- Stores multiple configurations
- Operates from Universal AC power (115V/230V)
- Small Zero case

SPECIFICATIONS:



Frequency Band (Specify on order)	P, LL, UL, S, or NATO E-Band
IF Bandwidths 4 (Specify on order)	Choose from 0.5, 1, 1.5, 2.0, 2.5, 3.0, 3.5, 4, 6, 8, 10, 12, 16, 20 MHz
Input Connector	SMA (Type N Optional)
70 MHz Output Connector	SMB - for test or external demodulator
Noise Figure	8 dB (max); 5 dB (typ)
Operating Input Level	-10 dBm to Threshold
Maximum Input Level	+18 dBm without damage
Input Rotary Step Attenuator	70 dB in 10 dB steps (mechanical)
Demodulator Types	FM & AM (SOQPSK, Multi-H CPM Optional)
Bit Sync Input Codes	NRZ-L, M, S; RZ-L, M, S; Bi-Φ-L, M, S; M-M, M-S; M ² -M, M ² -S;
Bit Sync Tape Output Codes	RNRZ-L, M, S
BNC Connectors (5)	Rcvr Data Out; BS In; BS NRZ, CLK, and Tape Out
D-Series Out (15 contacts)	Diff Out, AM Out, Diff Tape Out, RSSI
D-Series Programming (9 contacts)	RS-232
Status Lights	Signal Present and BS Lock
Setup memory	Up to 32 Receiver/Bit Sync setups can be stored
Size	9" (229mm) x 6" (153mm) x 7.5" (191mm)
Power	115/230 50/60 Hz (Selectable)