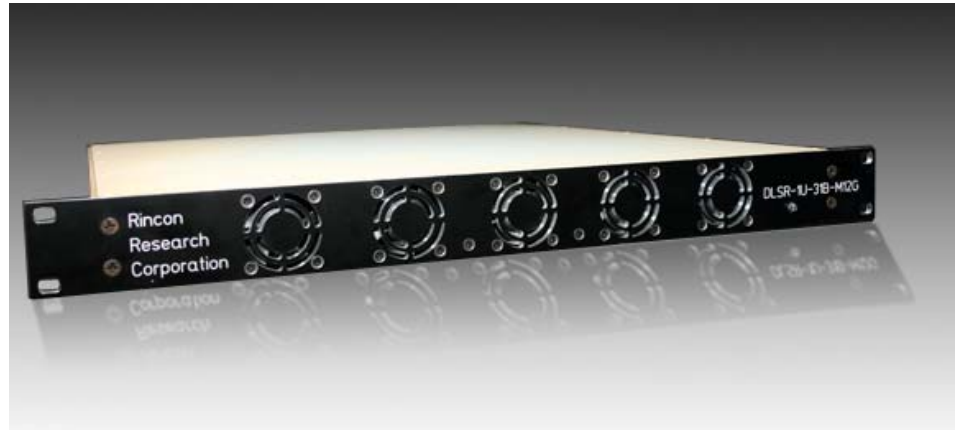


The DLSR is a highly versatile S/W radio with the ability to use COTS down-converters with L-Band output. The DLSR can view the full 800MHz input B/W with 4mSec snapshots and provide outputs via Gigabit Ethernet.



Features

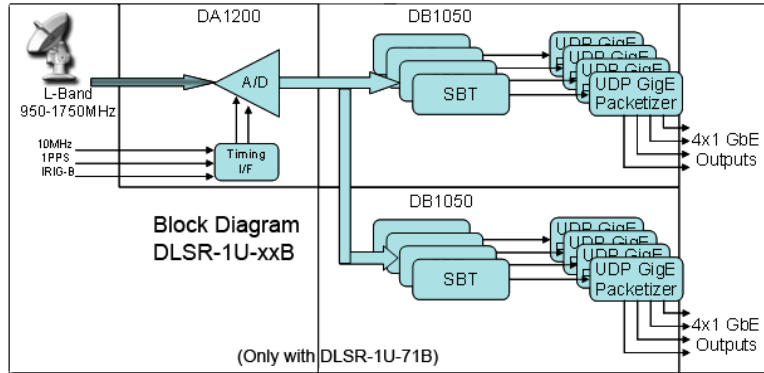
- Analog input B/W 950–1750MHz (L-Band)
- 10-bit A/D converter, 1800MSPS (7.2 ENOB)
- 8MB full-rate wideband snapshot capability
- 4 independent sub-band tuners (SBTs) with 2.5/5/10/20/40MHz selectable output bandwidth
- Precision time tagging with IRIG-B/1PPS/10MHz reference
- Ethernet interface for command/control
- 4/8 Gigabit Ethernet interfaces dedicated for data output
- Each output is independently selectable with sub-band tuned (SBT) or wideband snapshot data

Description

Rincon Research's DSPBrik™ L-Band software radio (DLSR) is an L-Band digitizer and sub-band tuner (SBT) software radio. The DLSR allows you to view the full 800MHz L-Band with up to a 4mSec snapshot and provides streaming SBT outputs via gigabit Ethernet outputs. Commercial-off-the-shelf (COTS) downconverters can be used to block downconvert bands of interest for input to the DLSR unit.

The analog input is filtered and directly digitized by the A/D using Nyquist sampling techniques. The DLSR only requires a 10MHz input to digitize L-Band at 1800MHz. With a 1PPS and IRIG-B timing signal the DLSR provides precise time-tagged outputs of the wideband snapshot and sub-band tuned data. The wideband snapshot provides the ability to view the entire 800MHz input signal environment. Gigabit Ethernet outputs provides ease of data transport and integration into systems. Command and control via Ethernet provides complete remote operations.

DLSR-1U-xx DSPBrik™ L-Band Software Radio



Specifications

General

Power Connector	NEMA5-15
Power	110/220VAC 50/60Hz, 125Watts
Number of Inputs	1
Number of Outputs	4/8 (DLSR-1U-31/DLSR-1U-71)
Command/Control	10/100 Ethernet, RJ45

Input

Analog	-27dBm nom., 50 ohm, AC Coupled, SMA
Clock/Reference	3 Vpp(max), 50 ohm, AC Coupled, SMA
1PPS	CMOS compatible, 50 ohm, SMA
Time	0.5Vpp to 6Vpp, IRIG-B, 50 ohm, 1kHz AM, 100pps, SMA or NMEA-0813, LEMO-style connector, DB9 adaptor supplied.

Output

Data Connector	Gigabit Ethernet, RJ-45
SBT Data Format	SDDS, 40MHz B/W 8 bits, 20/10/5/2.5MHz B/W 12/8 bit selectable
WB Snapshot Data Format	Snapshot length <= 8MB (<=4.4mSec), continuous, 8 bit resolution

Physical Properties

Dimensions	1U-19" Rackmount x 20"D or x 26" D
Temperature, Operating	0C to 50C

Ordering Information

DLSR-1U-31C	Four (4) Gigabit Ethernet SDDS Outputs
DLSR-1U-71B	Eight (8) Gigabit Ethernet SDDS Outputs
DLSR-1U-231B	Two (2) Analog Inputs Four (4) Gigabit Ethernet SDDS Outputs/Analog Input
DLSR-3U-331B	Three (3) Analog Inputs Four (4) Gigabit Ethernet SDDS Outputs/Analog Input