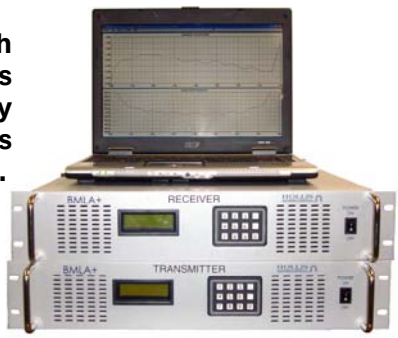
Burst Mode Link Analyzer Plus
RF BMLA+

HOLLIS ELECTRONICS COMPANY LLC

Hollis Electronics Burst Mode Link Analyzer Improved (BMLA+) is a high technology, low cost data link performance analysis tool, which allows operators to check for equalization issues and further determine exactly where in the RF chain equalization is required. The RF BMLA+ performs without reducing the quality of the signal or requiring costly down time.



IF Frequency Bands (user selectable)	70 MHz / 140 MHz
RF Frequency Bands (user selectable) L-Band:	950 MHz – 2150 MHz
C-Band (lower):	3.65GHz to 4.2GHz
C-Band(upper):	5.85GHz to 6.425GHz
Ku-Band (lower):	10.95GHz to 12.75GHz
Ku-Band (upper):	13.75GHz to 14.50GHz
Operating Bandwidth *(user definable)*	Variable *
Nominal input level	0 dBm to –40 dBm
Input dynamic range	12 Bits
Tx Levels	IF: -10 dBm to -70 dBm RF: -30 dBm to -70 dBm
Return Loss	18dB Max, 21dB Typ
Accuracy	1ns RMS, 0.1dB RMS
Signal-to-Noise ratio *(Noise or Data Carrier)*	< –25dB
Resolution	(0.5,1.0,2.0,4.0) MHz
Measurement Burst Duration	56us
Normalization	Up to 4-Files
PC Control Windows Program *(XP, Vista compatible)*	Ethernet for BMLA+
Multiple GUI's for Measurement Observation	Up to 3
Rx Spectral Inversion *(Allows use of Inverting Converters)*	
Frequency Skipping *(Allows skipping of frequency points to 0.5 MHz resolution)*	
CW Transmission *(Transmits CW tone at fixed frequency and power level)*	

*** Variable within operating bandwidth; Maximum bandwidths are 40 MHz for 70 MHz IF, 80 MHz for 140 MHz IF, and 80 MHz for RF bands.**

RF BMLA+

Test Configurations:

Loopback, co-located Transmitter and Receiver

Point-to-Point Transmitter and Receiver can be located anywhere with respect to each other

All modes support multiple users viewing the measurements remotely

Highlights: RF BMLA+

- Measures Group Delay and Amplitude response of an occupied transponder with no disruption of service at levels lower than 25 dB below the Revenue Traffic.
- Built-in RF Converters for L, C, and Ku bands provide for injection of BMLA+ signal anywhere in the RF chain allowing an operator to isolate the specific area of equalization issues.
- Patented measurement technique is immune to flat fading effects.
- Measurements can be automatic to show link availability and link quality.
- Fast and Easy to Save Measurement Data and Graphs with and without Normalization
- Persistence allows averaging of measurements for greater Accuracy. Infinite for maximum accuracy under very low SNR cases. User selectable for equalization under Low SNR.
- Both IF and RF frequencies inverted and non-inverted can be chosen via GUI.
- Impedance for IF frequencies can be chosen via GUI selection with no user connected transformers (50 or 75 ohms). RF impedance is based on RF-band and is non-selectable.
- Ethernet interface allows remote control and remote viewing by multiple users.
- LCD Display Shows Operating Parameters and Allows for Field Upgrades.

Applications:

Satellite

Line-of-Site (LOS)

Any link where IF or RF access is available

5 Northern Blvd Unit 13 Amherst NH 03031 TEL 603-598-4640 FAX 603-598-3428 www.holliselectronics.com

Specifications:

Transmitter and Receiver Specifications

These specifications apply to both the transmitter and receiver unless otherwise specified.

IF Frequencies:	70MHz or 140MHz
RF Frequencies:	L-Band: 950 MHz – 2150 MHz C-Band: 3.65 GHz to 4.2 GHz *(TX only)* C-Band: 5.85 GHz to 6.425 GHz *(RX only)* Ku-Band: 10.95 GHz to 12.75GHz *(TX only)* Ku-Band: 13.75 GHz to 14.50GHz *(RX only)*
Frequency Resolution:	0.5, 1.0, 2.0, 4.0 MHz
Sweep Width:	Variable with operating BW 40 MHz max for 70 MHz IF, or 80 MHz max for 140 MHz IF, or 80 MHz max for RF.
Frequency Skipping:	Yes (up to 0.5 resolution)
Impedance:	User selectable for IF (50 or 75 ohms) L-Band: 75 ohms C-Band: 50 ohms Ku-Band: 50 ohms
Connector Type:	IF: BNC L-Band: BNC C-Band: Type-N Ku-Band: SMA
VSWR:	1.25 : 1 Max, 1.10 : 1 Typical
Reference Internal: Reference External:	10 MHz ±0.1ppm, stability 10 MHz (determined by source)
Ethernet Connector:	RJ45
AC Power:	50VA
LCD Display:	Shows Operating Parameters; Used for Field Upgrades

Transmitter Only Specifications

IF Tx Output (1dB steps):	-10 dBm to –70 dBm
RF Tx Output (1dB steps):	-30 dBm to –70 dBm
CW Transmission Mode:	Yes (at fixed frequency & power level)

Receiver Only Specifications

Power Input:	0dBm to –40dBm
Signal-to-Noise Ratio:	≤ -25 dB
Max Frequency LO error:	± 25 KHz
Accuracy:	±1 ns RMS; ± 0.1 dB RMS

Specifications *(continued):*

Environmental

Operating Temp. Range:	25° C nominal +/- 5° C
Storage Temperature	0° to 80° C
Humidity range	20 to 80% RH

System Specifications

Power Requirements	
Voltage	100-120 VAC 220-250 VAC, auto sensing
Frequency	47-60 Hz
Dimensions	19 inch 2U chassis 18.25” D x 19” W x 3.5” H (534mm D x 483mm W x 178mm H)
Weight	TX 14 lbs RX 14 lbs

Training:

On-site Training Available

Hollis Electronics customizes RF BMLA+ training to your specific needs. Training performed on-site.

Ordering Information:

Send all inquiries to:

Hollis Electronics Company, LLC
5 Northern Blvd, Unit #13
Amherst, NH 03031
USA

hec@holliselectronics.com

603-598-3428 (FAX)
603-598-4640 (phone)

For custom solutions and training, please provide detailed requirements with inquiry.