BMLA^2+

HOLLIS
Electronics Company LLC

The Enhanced Burst Mode Link Analyzer 2.0 (BMLA^2+) is the latest offering by Hollis Electronics Company LLC (HEC) in its line of BMLA products. The BMLA^2+ allows operators to measure and correct channel equalization issues without reduced quality of costly downtime. The BMLA^2+ improves on its predecessors by offering more options for wider input & output dynamic ranges, wider bandwidths, finer resolutions, and new Continuous Wave (CW) measurement modes.

Key Features[1]:

Frequency Bands	70 MHz IF, 140 MHz IF, L-Band[2]
Maximum Operating Bandwidth	80 MHz standard, up to 120 MHz or more [3]
Resolution	50 kHz, 500 kHz standard, 1 kHz optional[4]
Transmit Level	0 dBm to -70 dBm
Receive Level	0 dBm to -70 dBm
Return loss	18 dB Max, 21 dB typical
VSWR	1.25: 1 Max, 1.1: 1 Typical
Signal-to-Noise Ratio (Noise or Carrier)	≤ -25 dB
Accuracy:	±1ns RMS, ±0.1 dB RMS
Characteristic impedance:	50 Ω standard, 75 Ω optional [5]
Measurement time:	Variable[6]

Usage:

- Measure Group Delay and Amplitude response of an occupied transponder with no disruption of service at levels 24 dB below traffic.
- Measurements can be automated to show link availibility and quality.
- Allows remote connection by multiple users to share measurements remotely in real time.
- Frequency skipping allows for scenarios where certain frequencies must be avoided.
- Patented measurement technique is immune to effects of flat fading.
- Seemlessly handle spectral inversion with UI interface.
- Operates on internal or external reference.
- 70 MHz IF and 140 IF MHz modes allow for easy integration with many RF converters and block converters.
- LBand operation allows direct measurement of LBand system and easy integration with multi-stage converters.

Applications

- Loopback testing with a single system.
- Point-to-Point measurements with two or more systems located anywhere.
- Satellite Communications.
- In-Orbit Testing.
- Line-of-Site.

Optional Features:

- Optional Continuous Wave (CW) Mode:
  - CW transmit mode allows for transmission of CW tones.
  - CW receive mode allows for measurements of CW tones frequency and power levels.
  - Operates at same frequencies as standard operating mode.
  - Measure 3rd order products.
- Multi-channel systems.

Additional Information:

- Easy to use User Interface (UI) allows for easy control of system.
- Measurement persistance allows for averaging of measurements for higher accuracy.
- Measurement time after acquisition depends on SNR.[7]
- User selectable acquisition mode allows for faster measurements in high SNR scenarios.
- Connect to systems via multiple computers for remote observation.
- Measurement normalization.
- Easy to use API allows integration of the system into larger systems.
- HEC offers remote or on-site training customized to meet customer needs.

Specifications:

Environmental

Operating Temp. Range:	25°C ±5°C
Storage Temperature:	0°to 80 °C
Humidity:	20 to 80 % RH

System

Power Requirements:	100-120 VAC, 220-250VAC, 47-60 Hz
Dimensions:	2U chassis (18.25” D x 19” W x 3.5” H)
Weight:	TBD, $\leq$ 15 lbs
Reference Accuracy:	±1 ppm
Reference Stability (vs. Temp):	±.05 ppm
Refernce Stability (vs. Age):	±10 ppb / day
Total Frequency Tolerance:	±4.6 ppm [8]
Ethernet Controller:	Gigabit
IF Connector Type:	Various
L-Band Connector Type:	Various

Ordering:

Send inquires to:
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or contact us via our website.

Notes

1. Most features customizable upon request.
2. L-Band refers to 950 MHz to 2150 MHz.
3. 70 MHz IF is limited to 40 MHz bandwidth, inquire for bandwidths greater than 120 MHz.
4. Inquire for additional resolution options.
5. A system can also have both with a user selectable option.
6. Measurement time is a function of bandwidth and resolution. More information can be found in the user manual.
7. In this context the noise includes user/transponder signals that may be present.
8. This includes changes in temperature, supply voltage, load, and 15 years aging