LBDG-PRO-50 DOCSIS 3.1 1P

technetix

Enable your preferred small cell access point (AP) or IP camera with this affordable, Technetix-tough DOCSIS® 3.1-based infrastructure utilizing up to 50 W PoE++.

Flexibility matters in 802.11 deployments. The Technetix LBDG-PRO-50 DOCSIS 3.1 1P, four pair DOCSIS gateway allows the use of high power PoE++ devices on the HFC strand. You can use a Technetix device, or any small cell, AP, IP camera, etc. that is compatible with 802.3at-based four pair schemes. Designed to maintain reliability and minimize costs, the hardened gateway uses a standards-based DOCSIS cable modem that is completely under the control of the cable operator. It can be used in conjunction with SNMP monitoring systems to evaluate cable plant line conditions.
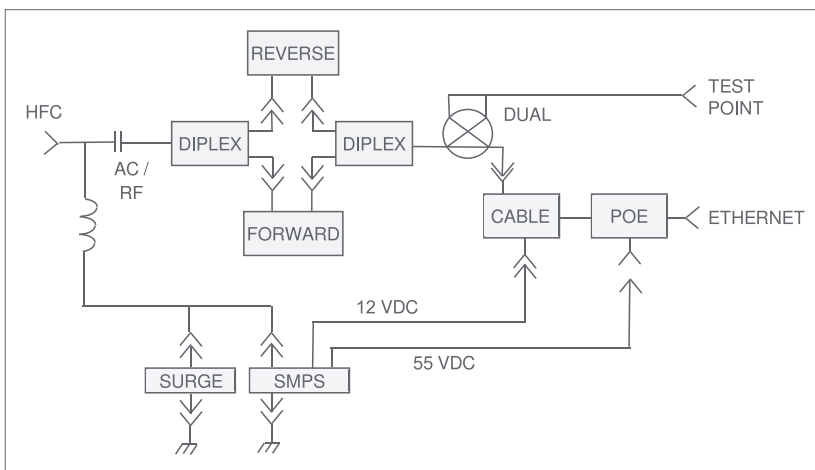

LBDG-PRO-50 DOCSIS 3.1 1P
(front view)

FEATURES

- Diecast aluminum housing (clamshell)
- Mounting configurations: strand, vault, pedestal or wall
- 15 PSI weatherproof seal
- Operating temperature range: -40°C to +60°C (-40°F to +140°F)
- DOCSIS 3.1 compliant
- Cable plant-powered (40-90 VAC)
- 6 kV surge protection

- HFC access at any directional coupler or power passing tap
- Weather-tight RJ45 Ethernet connector
- Coax power interface protects RF performance of HFC plant
- 802.3at PoE++ (provides up to 50 W when using 4 pairs)
- Monitor and configure via SNMP agent, SSH or web browser
- Add small cell, Wi-Fi®, camera or other service-enabling device

FUNCTIONAL SCHEMATIC

SPECIFICATIONS

Parameter		Specification
Cable Modem		
Band Plans		DOCSIS® 3.1
Network Configuration & Management		TFTP, SNMP (V1, V2c, V3), Telnet, HTTP
Input Impedance		75 Ω
Privacy		BPI+
Downstream Modulation		Up to 32 SCQAM or 2 OFDM
RF Input Sensitivity [1]	Modem F-port	+15 to -15 dBmV
	Housing 5/8" Port	+20 to -10 dBmV
Upstream Modulation		Up to 8 SCQAM or 2 OFDMA
Upstream Data Rate (Max.)		Over 1 Gbps
Transmit Power (Max.)	Modem F-port	+65 dBmV for OFDMA
		+57 dBmV for 16 QAM, 4-8 upstreams
	Housing 5/8" Port	+61 dBmV for OFDMA
		+53 dBmV for 16 QAM, 4-8 upstreams
HFC		
Return Loss		-16 dB (min.) with 75 Ω termination
		-8 dB (min.) with termination by modem
Insertion Loss [1]	Downstream	-5 dB (± 1 dB)
	Upstream	-4 dB (± 1 dB)
Test Point		-20 dB relative to cable modem RF port
Pad Type		JXP, separate forward & reverse
EMI Isolation		100 dB (5-1000 MHz)
Surge Withstand (HFC)		ANSI-IEEE C62.41 Cat B3 6 kV (gas tube or solid state crowbar)
Input Powering		40-90 VAC (pseudo sine)
Ethernet		
Throughput		10/100/1000 Mbps
Reach		109.4 yd (100 m)
Interface		RJ45
PoE	Type	Passive (compatible with 802.3at)
	Voltage	48 VDC
	Output Wattage	50 W using all 4 pairs or 60 W peak (with 15 W/1 ms, 60 W/4 ms profile)
		30 W when using 2 pairs
Environmental & Physical		
Ingress Protection		IP68 (15 PSI for 10 seconds)
Operating Temperature		-40°C to +60°C (-40°F to +140°F)
Dimensions (H x W x D)		8.5"H x 11.5"W x 5.0"D (21.6H x 29.2D x 12.7W cm)
Weight		6.0 lb (2.7 kg)

NOTE:

(1) Levels reported by modem management interfaces reference the modem F-port. Levels at the gateway KS port incorporate the internal -5 dB/-4 dB loss of the HFC interface

ORDERING INFORMATION

Part #	Description
LBDG-PRO-50 DOCSIS 3.1 1P	4 pair POE++ DOCSIS 3.1 gateway, 1-port 50 W output, 8200 modem

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