

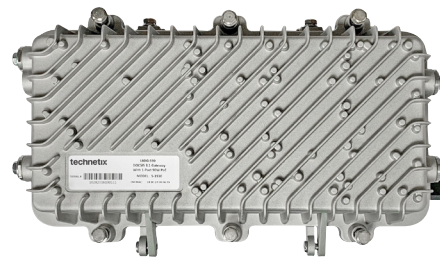
PoE++ DOCSIS® gateway 90 W output LBDG-S90



Enable your preferred access point (AP) or IP camera with Technetix' cost-effective, tough, DOCSIS®-based infrastructures utilizing up to 90 W 802.3bt Type 4 compliant.

Flexibility matters in 802.11 deployments. Technetix' LBDG-S90 series DOCSIS gateways allow the use of high-power devices on the HFC strand. You can use a Technetix recommended device, or any AP, IP camera, etc. that is compatible with 802.3bt Type 4 schemes.

Designed to be highly reliability and minimize costs, the hardened LBDG-S90 series use a standards-based DOCSIS cable modem that is completely under the control of the cable operator. They can be used in conjunction with SNMP monitoring systems to evaluate cable plant line conditions.

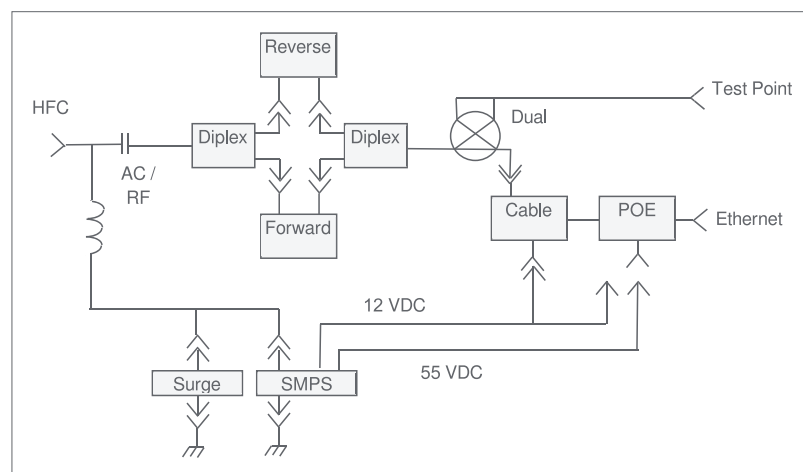


LBDG-S90
(front view)

FEATURES

- Diecast aluminum housing (clamshell)
- Mounting configurations: strand, vault, pedestal or wall
- Gasket provides 15 PSI weatherproof seal
- Operating temperature range: -40°C to +60°C (-40°F to +140°F)
- Designed to protect against surges: ANSI-IEEE C62.41 Cat B3 6 kV
- DOCSIS 3.0/3.1 compliant
- Cable plant-powered (40-90 VAC)
- HFC access at any directional coupler or power passing tap
- Weather-tight RJ45 Ethernet connector
- Coax power interface protects RF performance of HFC plant
- 802.3bt Type 4 (provides up to 90 W)
- Monitor and configure via SNMP agent, SSH or web browser
- Add 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	802.3bt Type 4, 802.3at
	Voltage	55 VDC
	Output Wattage	90 W using all 4 pairs 92.5 W peak
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)	10"H x 17"W x 6.5"D (25.4H x 43.2D x 16.5W cm)	
Weight	16.8 lb (7.6 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-S90	PoE++ DOCSIS 3.1 gateway 90 W output 8200/1PPOE