Model CLA-4
Centrian Line Amplifier

PBE

INNOVATING SAFETY. POWERING PRODUCTIVITY.

Functionality Description

The Model CLA-4 is a component of the Centrian System. It compensates for radiating cable losses and provides amplification of both voice and data channels. The CLA-4 utilizes independent Automatic Gain Control (AGC) in each direction (uplink and downlink) to automatically balance the system. Additionally, the data band features Automatic Slope Control (ASC) for noise suppression.

Remote monitoring of the CLA-4 is available through the use of the Centrian Diagnostic Software. Information displayed through the software includes the unit's identification number, location, operating mode, line voltage, current, temperature, and a comprehensive range of RF parameters.

The CLA-4 features an external modem port for connection to an external cable modem. There are also integrated tracking options available.

Amplifier Frequency and Gain	
Voice Uplink	
Frequency	171 – 175 MHz
Max Gain	21 dB
Return loss	< -10 dB
Voice Downlink	
Frequency	155 – 159 MHz
Max Gain	20 dB
Return Loss	< -10 dB
Data Uplink	
Frequency	5 – 42 MHz
Max Gain	12 dB
Return Loss	< -14 dB
Data Downlink	
Frequency	216 – 232.5 MHz
Max Gain	24 dB
Return Loss	< -14 dB
General Specifications	
Voltage	8 – 30 VDC
Current	270 mA (@ 12 VDC); 140 mA (@ 24 VDC)
Impedance	75 ohm
Connectors	Terminal Block, 3 position, screw type
Weight	2.1 kg (4.7 lbs.)
Dimensions	26 x 16 x 9 cm (10.2 x 6.3 x 3.5 in)
Warranty	1 year

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Features

- Compensates for radiating cable losses on the CMTS RF channels, as well as the narrow band voice / data channels
- Uses independent Automatic Gain Control (AGC) for uplink and downlink
- CMTS data bands feature Automatic Slope Control (ASC)
- Information such as amplifier voltage, current, gain, and temperature can be remotely monitored through the Centrian Diagnostic Software
- Features an external modem port for connection to an external Cable Modem
- Tracking option available

The Centrian System

Centrian provides high speed data, remote control, and voice communications over standard radiating cable (leaky feeder). Allowing for existing cable infrastructure to be easily upgraded. Partial Centrian network deployment can be achieved with minimum headend additions and installation of amplifiers while maintaining existing amplifiers.

Extensions to the network can also be achieved by separate fiber routing to remote areas, allowing for further Centrian deployment. Full reporting, geographical maps, diagnostics, and alarms are provided by PBE's user friendly Centrian, or integrated into PBE Vantage, the control and monitoring software suite.