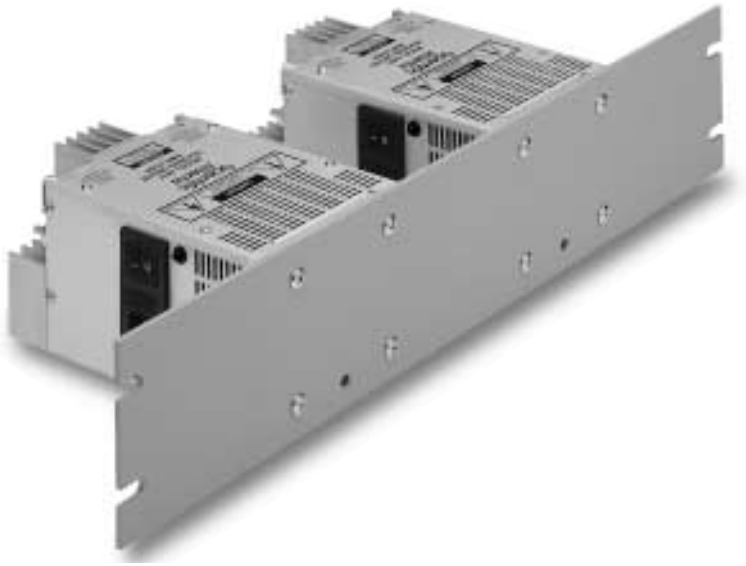
Scientific Atlanta

860 MHz Model 6454 PHD Headend Driver Amplifier



20046

The Scientific-Atlanta 860 MHz Model 6454 Headend Driver Amplifier is an indoor PHD amplifier designed for headend configurations requiring multiple laser transmitters. As an optional accessory, the pre-drilled P3 panel allows two units to be mounted in a standard headend rack.

DESCRIPTION

Housed in a compact (3.25 in. x 6.5 in.) chassis, the Model 6454 Headend Driver Amplifier can be powered by 220 V AC, 230 V AC, 240 V AC, or 24 V DC. The amplifier has a minimum RF gain of 17.0 dB. It uses a PHD gain block to obtain optimum distortion performance at operational output levels. Optional accessories include various values of standard Scientific-Atlanta pads and equalizers. A pre-drilled P3 panel kit (part number 502417), designed for mounting the unit in a standard headend rack is also available. This kit provides access to the -20 dB test points directly from the face of the P3 panel.

FEATURES

- Compact size
- Rack mountable (predrilled P3 panel)
- PHD gain stage up to 860 MHz
- 17.0 dB minimum full gain
- 220 V, 230 V, or 240 V AC line power
- Configurable for 24 V DC powering
- Input/output directional coupler RF test points
- Plug-in pad and equalizer
- Power switch with external fuse
- Power on LED (AC power only)
- Direct heat transfer through finned heat sink

CE

860 MHz Model 6454
PHD Headend Driver Amplifier

SPECIFICATIONS

Power
220 V AC, 0.20 A, 31 W
230 V AC, 0.19 A, 31 W
240 V AC, 0.18 A, 31 W
+24 V DC, 750 mA (configurable)

Safety Compliance
Certificates of Conformity to
IEC 950 / EN 60 950
UL 1419, CFR 21, and CSA 22.2 No. 1

Electromagnetic Compatability
Conducted and radiated interference in compliance with EN 55013 / CISPR Pub. 13, EN 55020 / CISPR Pub. 20, FCC Part 15, Subpart B, and DOC Regulation CRC c. 1374

Power Supply
24 V (nominal)

RF Test Points
-20 dB ± 1.0 dB

Dimensions
3 1/4 in. x 4 in. x 6 1/2 in.

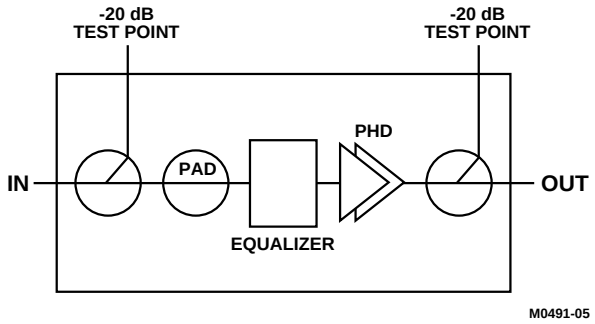
Operating Temperature (Ambient)
32˚F to 120˚F (0˚C to 50˚C)

OPTIONAL ACCESSORIES

- 19 in., 3-rack unit P3 panel, coaxial cable assemblies and connectors pre-drilled for mounting up to two 6454 units on a single panel
- Various value pads and equalizers common to RF distribution products

Specifications and product availability are subject to change without notice.

Specifications shown reflect typical equipment performance at stated reference levels in the recommended operating configuration. Specifications are based on measurements made in accordance with NCTA Practices for Measurements on Cable Television Systems using standard frequency assignments and are referenced to 68°F (20°C).



The Model 6454 Headend Driver Amplifier features a simple, functional design.

Model Number Part Number	6454 545828
Bandwidth	51 to 860 MHz
Minimum Gain	17.0 dB
Flatness	.75 dB P/V
Return Loss	18 dB @ 51 MHz, -1.5
dB/OCTAVE	
Noise Figure @ 51 MHz	4.5 dB
Noise Figure @ 860 MHz	9.0 dB
Composite Triple Beat	Note 1
42 CENELEC Channels	-60 (Note 2)
96 PAL B/G	-60 (Note 3)
Composite Second Order	Note 1
42 CENELEC Channels	-66 (Note 2)
96 PAL B/G	-66 (Note 3)
X MOD	
42 CENELEC	-61 (Note 2)
96 Pal B/6	-61 (Note 3)

1. Tested per CENELEC Standard EN50083-3
2. Measured distortions at 20 degree C. 42 Channel CENELEC standard channel raster was used with a rated output level of 107 dBuV. Measurements were conducted using a spectrum analyzer with a maximum gain and a flat input frequency response.
3. Measured distortions at 20 degree C. 96 PAL B/G channel raster was used with a rated output level of 103 dBuV. Measurements were conducted using a spectrum analyzer with maximum gain and a flat input frequency response.

Scientific Atlanta

Scientific-Atlanta, Inc http://www.sciatl.com
United States: 4261 Communications Drive, Norcross, GA 30093; Tel: 800-433-6222; Fax: 770-903-4617
Canada: 7725 Lougheed Highway, Burnaby, BC V5A 4V8; Tel: 604-420-5322; Fax: 604-420-5941
United Kingdom: Home Park Estate, Kings Langley, Herts WD4 8LZ, England; Tel: 44-923-266-133; Fax: 44-192-327-0448
Singapore: 1 Claymore Drive, #08-11 Orchard Towers, Singapore 229594; Tel: 65-733-4314; Fax: 65-733-2706
Hong Kong: Suite 56 & 57, 5/F New Henry House, 10 Ice House Street, Central, Hong Kong; Tel: 852-2522-5059; Fax: 852-2522-5624