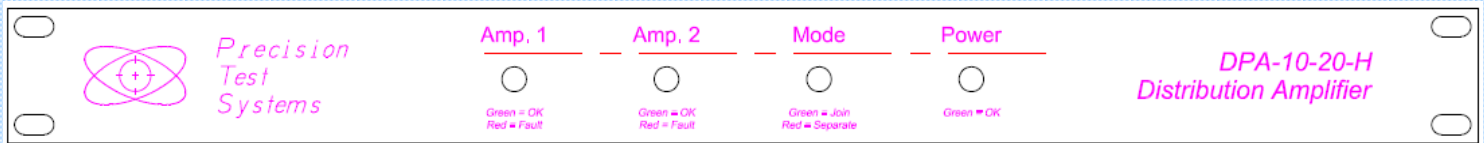




DPA-10-20-H: 0 – 20 MHz Pulse/Frequency/Time Code Distribution Amplifier



Provisional Front Panel Picture

Key Features

- 2 inputs: 1/12 or 2/6 input/output
- Input coupling selectable AC or DC coupled
- Free Windows Software
- Ultra-Low Allan Deviation
- Frequency: 0 Hz – 20 MHz (usable to 50 MHz)
- Pulse Frequency: 1PPS to 20 MPPS
- IRIG Time Codes either AM modulated or DC shift
- Ethernet Interface with Embedded Web Page
- Free Windows Control Software

General Description

The DPA-10-20-H is a universal distribution amplifier capable of distributing frequency, squarewave, pulses or time code signals all in one 19" rack mount 1U device. It has two inputs that can be configured as one input with twelve outputs or two inputs each with six outputs.

Full monitoring and control is achieved via an Ethernet interface. An embedded web page can be used to monitor and control the unit from anywhere in the world. Alternatively, free console software is supplied.

Options

Various options are available. If the option you require is not shown, just email us your requirements and we will advise whether it can be designed.

- Option 02: G703 compliant outputs. Outputs levels are -1.2V to +1.2V into a 75 Ω load.
- Option 03: Internal DDS, 0-80 MHz in 1 μ Hz steps. Adjusted by RS232. This option is usually fitted with option 02 to give 2.048 MHz G703 outputs from a 10 MHz input.

Miscellaneous Information

The DPA-10-20-H is a highly reliable unit with an MTBF of over 60 years. The DPA-10-20-H is housed in a fully screened 19" rack mount case and operates from a 100 - 240 VAC supply (usable 90 – 260 VAC) or external 12 V DC. The DPA-10-20-H is CE marked for sale within the EEC.

DPA-10-20-H SPECIFICATIONS

| Specification Parameter | Specification | Comments |
|---|---|--|
| Frequency Input (Sinewave) | | |
| Frequency Range | 0 to 20 MHz | Usable to > 50 MHz |
| Input Impedance (sinewave) | 50 Ω or 600 Ω | Selectable using Ethernet Interface |
| Maximum Input Level (50 Ω) | +18 dBm | Damage Level +20 dBm |
| Frequency Output | | |
| Frequency Flatness (0 – 20 MHz) | < ± 0.5 dB | Typically, < 0.4 dB |
| Gain | Selectable -7 dB to +10 dB | Selectable using Ethernet Interface |
| Gain Setting Error | < 1.5 dB | |
| Harmonics | -40 dBc | Typically, < -45 dBc |
| Input Impedance (Standard unit) | 50 Ω or 600 Ω | Selectable using Ethernet Interface |
| Phase Noise | -130 dBc @ 1 Hz offset | Typical |
| Allan Deviation | < 3 x 10 ⁻¹⁴ @ 1 second | < 3 x 10 ⁻¹⁶ @ 1000 sec |
| Channel to Channel Isolation | > 70 dB | Typical |
| Pulse / DC IRIG Time Code Input | | |
| Frequency | 1PPS to 20 MPPS | |
| Level | 0-5V p-p | |
| Duty Cycle | 0 to 100% | |
| Input Impedance | 50 Ω or 600 Ω | Selectable using Ethernet Interface |
| Pulse / DC IRIG Time Code Outputs | | |
| Frequency | 1PPS to 20 MPPS | |
| Duty Cycle | 0 to 100% | |
| Rise / Fall Times | < 7 ns | |
| Output to Output Match | < 2.5 ns (joined mode 12 outputs) < 0.7 ns (separate mode 6 outputs) | Typically, < 2 ns Typically, < 0.55 ns |
| Input Impedance | 50 Ω or 600 Ω | Selectable using Ethernet Interface |
| AM IRIG Time Code Input / Outputs | | |
| Frequency | 1 PPS to 10 MPPS | |
| Level | 0-5 V p-p | |
| Modulation Frequency | Up to 1 MHz | |
| Code | Format: Any IRIG format, IEEE 1344, NASA 36, 2137, XR3 | |
| Input Impedance | 50 Ω or 600 Ω | Selectable using Ethernet Interface |
| General | | |
| Power: AC / DC | 100 - 240 VAC | 30 Watts max / 1.0Amps with opt 03 |
| Size and weight | 483 x 300 x 44 mm and 4.6 kg | Width x Depth x Height |
| Ambient Operating Temperature | -10°C to +60 °C | |
| Head Office - UK | South Africa | USA |
| Precision Test Systems LTD The Studio, Whitehouse Farm New Hall Lane, Mundon Maldon, Essex, CM9 6PJ, UK Tel: +44 (0) 870 368 9608 Fax: +44 (0) 1245 330030 Email: uksales@ptsyst.com Web: www.ptsyst.com | Precision Test Systems cc Randburg 2196 South Africa Fax: 08651 58198 Email: sasales@ptsyst.com Web: www.ptsyst.com | Precision Test Systems 304 S. Jones Blvd, Suite # 807 Las Vegas Nevada, 89107, USA Tel: 1 888 876 4804 Fax: 1 832 201 6564 Email: usasales@ptsyst.com Web: www.ptsyst.com |

Specifications subject to change without notice (020117)