

AOD RF Driver 100435A



High Power Three Phase RF Driver

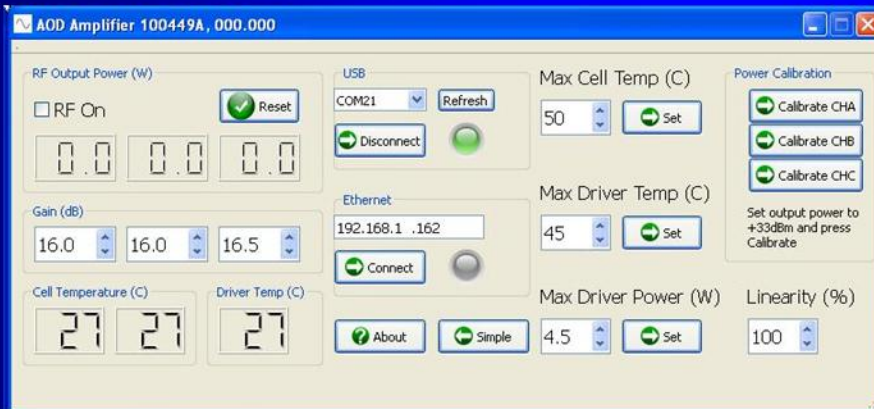
High IP3

200MHz

10W

3 Phase

USB



Features:

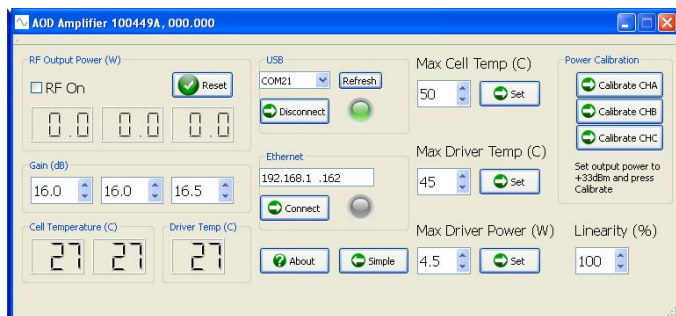
- Phase shifted RF outputs
- 200MHz, 10W per channel
- Adjustable PA linearity and gain
- Temperature / Power Monitor
- Overpower Protection
- USB and Optional Ethernet
- Alarm Output
- 19", 2U Chassis

Applications:

AO Cell Driver

Overview

The Acousto-Optic Deflector (AOD) RF Driver is a three channel, three phase high power driver amplifier intended to drive devices such as the Harris H-902. The driver accepts a single low level RF input and produces three high power phase shifted outputs. The driver features adjustable gain, power monitoring, and programmable automatic protection features. The exceptional linearity and headroom allow the use of multi-tone and complex waveforms with minimal distortion.



Configuration and control are accomplished using the supplied Windows application and USB or optional Ethernet connection. Once connected, the operating parameters can be configured. Each output features independent gain control and power monitoring. Should the RF power on any of the three outputs reach the preprogrammed trip level, the RF power will be automatically disabled to protect the connected AOD. Driver temperature and AOD cell temperatures are also continuously monitored and displayed.

Ordering Information

| Part Number | Description |
|-------------|--|
| 100435A | Wide Band AOD Amplifier Assembly |
| 100435A-E | Wide Band AOD Amplifier Assembly with Ethernet |

Operation

Specifications

| Parameter | Units | Typical Specifications |
|-----------------------------------|-------|---|
| Frequency | MHz | 150 to 250 |
| Relative RF output timing (A-B-C) | nS | 5, +/- 0.05 |
| RF channel gain | dB | 36 (adjustable in 0.5dB steps) |
| 1dB RF compression | dBm | 40 ¹ |
| Two tone, third order intercept | dBm | 50 ¹ |
| Maximum input power (damage) | dBm | +10 |
| RF input / output impedance | Ohms | 50, SMA |
| Alarm Output | V | 3.3 CMOS levels |
| Computer Interface | | USB-2 or optional Ethernet, Windows driver supplied |
| Power | | 120VAC, 5A max |
| Unit Dimension | | 19", 2U rackmount with mounting ears |

1: At a linearity setting of 100%