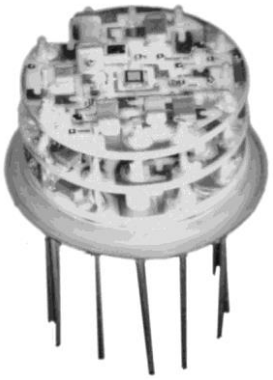
HYBRID LASER RANGEFINDER RECEIVER



- **High Sensitivity**
- **Hermetic TO-8 Package, 0.1 CU inch**
- **Fast Recovery – Low Minimum Range**
- **Silicon APD Detector**
- **No Negative Supply Required**
- **Field Proven Performance**

DESCRIPTION:

The ***Model 756*** hybrid laser rangefinder receiver is designed for laser rangefinding/surveying equipment. Because of the compact construction (Modified TO-8 header) and the PCB mounting capability, it is ideal for miniature applications. Fast recovery from T_o overload allows ranging to close objects without compromising long range performance. The incorporation of a 1.06 μm enhanced silicon APD gives very high sensitivity.

SPECIFICATIONS:

Detector	1.06μm, enhanced silicon APD, 0.8 mm ∅ Temperature compensated bias regulator
Sensitivity	3 nW typical (4 nW max.) at 1.06 μm, 28 ns pulse, 50% detection, 0.1% FAR, 20°C, degrades with narrower pulses and at higher temperatures.
T_o Pulse	
Optical	>0.2 μW or
Electrical	Pull output to zero for 100 ns. An open-drain FET is recommended.
Time Programmed Gain (TPG)	$1/R^2$ law operates from minimum range of ~40 m to 2 km with separate Tx/Rx optics. 0.7 V or open enables TPG. 0V or GND inhibits TPG and holds low gain.
Adjustments	Trigger level is adjustable to allow a change in signal-to-noise ratio.

Output	TTL or CMOS compatible, negative logic. Start/Stop on common line. ≥ 40 ns pulses. 470 Ω pull up to +5 V. Maximum sink current 5 mA.
Alignment	Analog test point for alignment (pin 2 or 8)
Power	+12 ± 0.5 VDC at 35 mA typical & >450 V via current limit resistor at 70 μA. See application notes for external resistor values for various supply voltages.
Temperature	
Operating	-32° to +64°C
Storage	-55° to +100°C
Connections	PCB mount, pins
Size	0.6" ∅ x 0.425"
Weight	≤0.173 oz (4.9 grams)

Specifications subject to change without notice.

APPLICATIONS:

Laser Rangefinding and Surveying

"In the event this commodity will be transferred to a "foreign person" as defined in 22 CFR 120.16, either outside or within the United States, a validated US State Department license is required."

126 BAYWOOD AVENUE ♦ LONGWOOD, FLORIDA 32750-3426 ♦ USA
(407) 339-4355 ♦ FAX (407) 834-3806 ♦ E-mail: ami@analogmodules.com
www.analogmodules.com

MODEL NUMBER

CONNECTIONS	756, PCB mount, PINS	**756**

Typical Part Number: ***756 =*** Connections: PCB mount, PINS