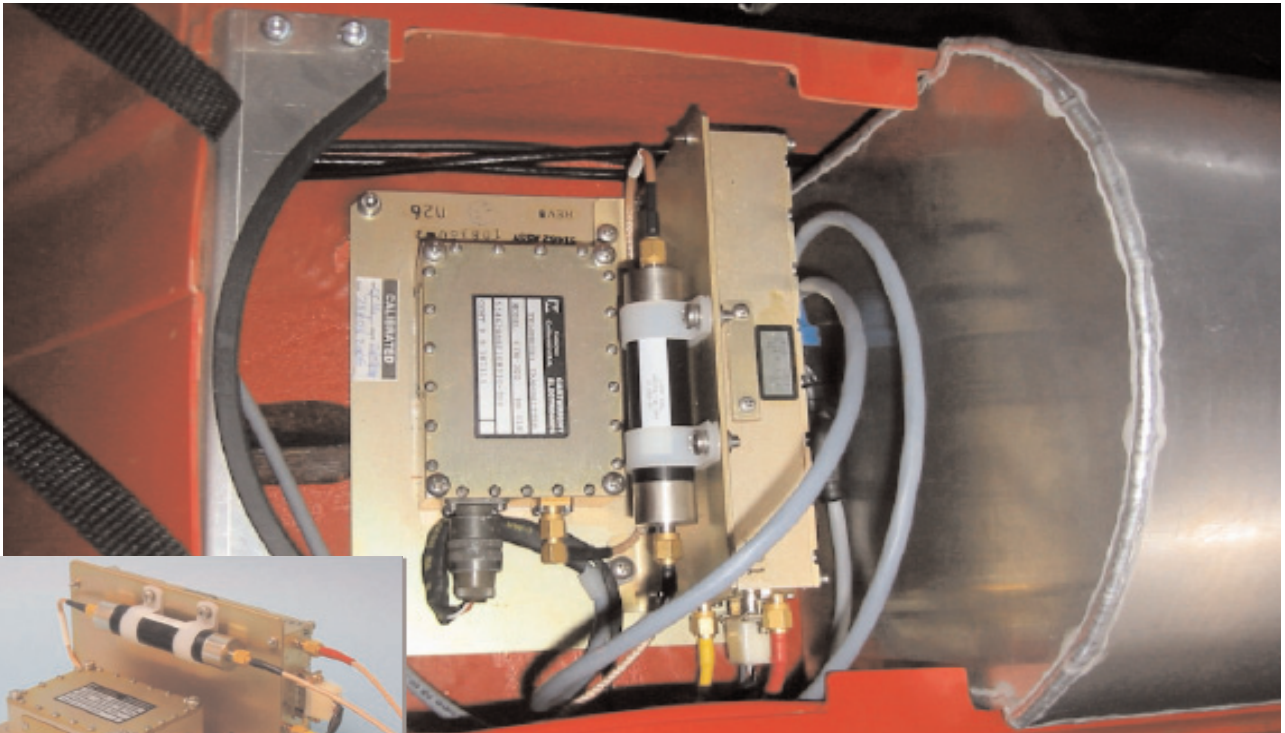


“MICRODOPS” Non-Cooperative Doppler Radar Sensor



Key features

- ▶ Scoring range
selectable - 9m (29.5 ft)
12 m (40ft); 20m (65 ft)
- ▶ Scoring accuracy - +/- 0.3m (+/- 1 ft)
- ▶ Operating Frequency 3245 MHz
- ▶ Relative Velocity
244 to 1829 m/s (800 to 6000 ft/s)
- ▶ Self telemetering
2 miles typical (function of antenna gain)
- ▶ Dual drone capability

Description

The Microdops Doppler Radar Sensor is a small, ultra-lightweight, low-cost scorer designed for use in a wide variety of aerial towed targets and drones. The sensor is easily adapted to the target through the use of an installation kit that contains required hardware

The microdops satisfies both air-to-air and surface-to-air scoring requirements: and, can be used for either counting small projectiles or as a scalar miss-distance indicator (MDI) for larger projectiles and missiles. A unique feature of this system is the self-telemetry capability which eliminates the need for a separate telemetry transmitter. Two frequencies are available to facilitate dual-target missions. The Microdops is readily adaptable to standard telemetry systems when extended range is required.

“MICRODOPS” Non-Cooperative Doppler Radar Sensor

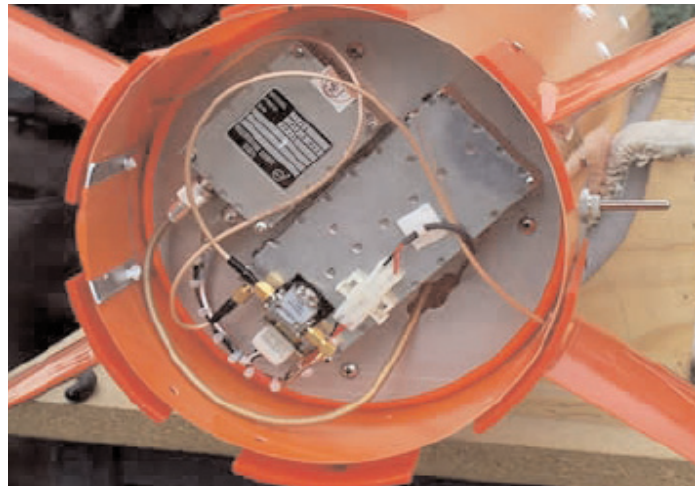
PHYSICAL SPECIFICATIONS

Electrical

Frequency	3.245GHz +/- 20 MHz
Scoring Range:	Adjustable 9m (29.5 ft) 12m (40 ft) and 20m (65 ft)
Velocity Range:	244 to 1829 m/s (800 to 6000 ft/s) relative velocity
Peak rf output power:	+27dB (Nominal)
Prf:	2.4576 to 3.367 MHz (Selectable for application)
Transmitter pulse:	
Rise time:	10ns (Nominal)
Fall time:	10ns (Nominal)
Width:	Selectable - 30, 45, 105 +/- 10ns
Self telemetry modulation:	
Deviation:	+/- 150kHz
Sub-carrier oscillator frequency:	100 kHz (Nominal)
Sub carrier deviation:	+/- 30kHz
Load V_{SWR} :	1.2:1 any phase
Input voltage:	28 +/- 4V dg @ 400 mA (Maximum)

Mechanical

Weight:	0.5 kg (16.9 oz)
Length:	16.2 cm (6.375 in)
Width:	7 cm (2.75 in)
Height:	2.9 cm (1.16 in)
Mounting Hardware:	Four off 4-40 screws
Typical Mating Hardware:	
J1 XMTR Output:	SMA Plug
J2 RCVR Input:	SMA Plug
J3 input/output:	9 pin DE-9S



This data may be changed without notice and is not binding.