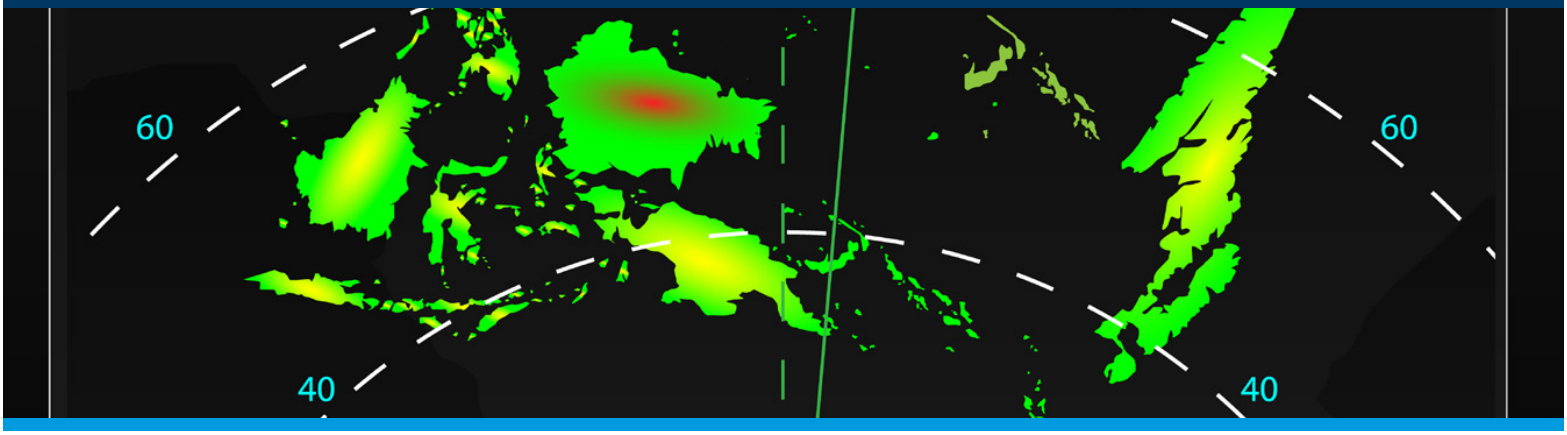
TELEPHONICS®
Trusted Technology for a Tactical Advantage
A Griffon Company

RDR-1600

Search, Rescue and Weather Avoidance Radar



Built on the superior reputation of its predecessor the RDR-1400C, the RDR-1600's digital technology provides full compatibility with integrated or glass-configured flight decks.

Weather Detection

The RDR-1600 provides a full-color presentation of weather returns, auto pitch/roll correction, pilot-selectable antenna tilt and scan angle and Built-in-Test (BIT) for the following operational modes:

- Weather detection/weather alert
- Search and Rescue (SAR)
- Surveillance
- Beacon detection mode
- Ground mapping

Search and Rescue

Search and rescue may be one of the most difficult aviation missions to perform successfully with inclement weather being the rule rather than the exception. The RDR-1600 offers a 240 NM display range and detailed close-ups at ranges of 1 NM or 0.5 NM which allows for safety and precision of movement to plan weather avoidance maneuvers.

Critical air-to-surface sweeps demand constant attention from both pilot and crew, and intercepting a beacon or target in heavy seas can be challenging. With the RDR-1600's weather alert feature, users are flashed a warning whenever third-level (red) weather areas are detected up to 25 NM beyond the selected range.

Airborne Surveillance

Different surveillance missions require different capabilities. The RDR-1600 provides three specialized search modes:

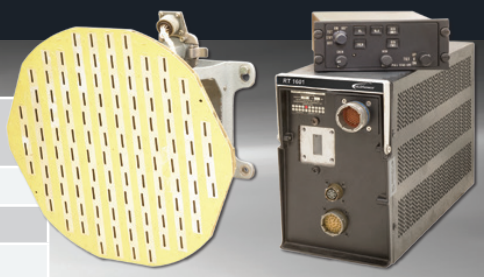
- Search 1 incorporates special sea clutter rejection circuitry to help detect small boats or buoys down to a minimum range of 450 ft.
- Search 2 is designed for precision ground mapping where high-target resolution is important
- Search 3 includes normal ground mapping which is useful to detect prominent land objects or coastlines

Operating Capabilities

Complying with Search TSO C102 and Weather TSO C63c, the RDR-1600 enables land or sea approaches in 200-ft. ceiling and 0.5 mile visibility minimums. Its beacon mode allows detection of DO 172 2-pulse and 6-pulse beacons, and can easily change modes with the push of a button. The RDR-1600 has a transmitter peak power output of 10 kW combined with a low power consumption of less than 100 watts. The RDR-1600 is available with four different antenna sizes and excels in the detection of small targets while operating at a typical helicopter altitude of 500 ft. (152 m).

Telephonics Corporation | 815 Broad Hollow Road | Farmingdale, New York 11735 | 631.755.7000

Search, Rescue and Weather Avoidance Radar



Technical Specifications

Range Frequency:	X-band		
RF Power Output:	10 kW nominal		
Antenna Size:	10 in., 12 in., 18 in. or 12 in. x 18 in.		
Scan Angle:	120° or 60°		
Scan Rate:	28°/second		
Display Range/Marks:	0.5/0.125, 1.0/0.25, 2.0/0.5, 5.0/1.25, 20/5, 40/10, 80/20, 160/40, 240/60 NM		
Minimum Detection:	Range (Weather Mode):	1,500 ft. (470 m)	
	Range (Search Mode):	450 ft. (135 m)	
Beacon Range:	Line-of-Sight or up to 80 NM		
Size:	Receiver/Transmitter:	Width:	5 in. (12.7 cm)
		Depth:	14.05 in. (35.69 cm)
	Antenna:	Swing Radius:	10 in. – 6.62 in. (16.82 cm)
			12 in. – 7.62 in (19.35 cm)
			18 in. – 10.62 in. (26.97 cm)
		Depth:	7.68 in. (19.5 cm)
Weight:	Receiver/Transmitter:	17.3 lb. (7.8 kg)	
	Antenna and Drive:	10 in. – 7.4 lb. (3.4 kg)	
		12 in. – 7.6 lb. (3.5 kg)	
		18 in. – 11.7 lb. (5.3 kg)	
		18 in. x 12 in. – 10.5 lb. (4.7 kg)	
	Control Panel:	1.7 lb. (0.77 kg)	
Power Requirements:	28 VDC @ 3.0 amps Hz @ 3.0 voltamps		
Temperature:	Receiver/Transmitter:	-50°C to +55°C	
	Control Panel:	-50°C to +55°C	



Mi-17V-5



AgustaWestland EH101

Value and Reliability

The RDR-1600 is a reliable and cost-effective commercial weather radar system complete with a two-year, no-hassle warranty. The RDR-1600 and its predecessor, the RDR-1400C, can be serviced by our worldwide network of service centers to keep you flying in all kinds of weather.

Main Features

- Narrow pulse precision approach mode (450 ft. minimum detection range)
- BIT circuitry
- Improved clutter detection
- ARINC 429 and 453 interface

For additional information, contact Telephonics at 631.755.7000 or visit www.telephonics.com.

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