

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

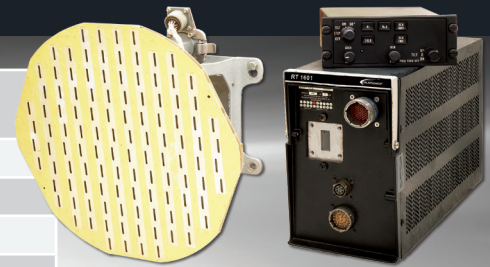
### Operating Capabilities

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).

# 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):	3000 ft. (915m)	
	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 @ 5.0 Amperes: 115 VAC, 400 Hz @ 3.0 VA		
Temperature:	Receiver/Transmitter:	-20°C to +55°C	
	Control Panel:	-20°C to +55°C	
	Antennas	-55°C to +70C	



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](http://www.telephonics.com).