

Medium and Long Range Air-Radar C or X Band

MODEL PHRDR-2100C
for long distances



*Picture for illustration only

General Description

The **PHRDR-2100C** is a Medium Range Air Radar, designed to detect and track aerial threats and ground intruders. Very effective for missions such as Counter Unmanned Aerial Systems, as well as air and ground surveillance.

The **PHRDR-2100C** is a portable, small-dimensioned, lightweight Air Radar, working on the **C** or **X** Band.
Fast deployment. Ideal for field tactical missions.

The **PHRDR-2100C** works on a pulse Doppler modulation, using a state-of-the-art phased array - Multi-Beam Antenna for altitude coverage of 0°-60°, and 360° azimuth coverage by the Antenna's rotation.

The detection range is up to 165km depending on threat type and can track up to 100 low flying targets.

System Features

- TWS of 100 targets
- Compact Size and Lightweight
- 3D Radar – 360° azimuth coverage
- Range up to 165km, depending on size and type of object
- Embedded GPS
- Digital Receiver
- Digital Beam Forming (DBF)
- Integrated/Standalone Operation Post
- Very high reliability
- Controlled and operated locally or remotely (depends on customer's request)
- Extensive BIT
- Low power consumption
- Rotor motor

System deployment:

Very simple field installation for tactical missions.

Prepare the tripod, install the rotor motor, and assemble the radar on top of it.

For optimal results, the tripod should be leveled using its spirit level

Connect power and communication cables.

The radar is controlled using a special management software running on a dedicated PC, connected to the radar via LAN cable.

The communication is using UDP TCPIP.

A WAN connection can be used for remote or long distance connection (Not included).

Technical Specifications

RF Characteristics	
Frequency	C or X Band 5.5GHz ± 100 MHz/7-8 GHz ± 200MHz
Detection Range	Up to 165 Km depending on threat type * see table 1
Range Accuracy	30m
Detected Target speed	0-400 m/sec
Detection Azimuth	360°
Azimuth Accuracy	0.3°
Detection Elevation	0° - 60°
Elevation Accuracy	1°
Update Rate	10 sec (6 rpm)
Resolution (Target's Box)	Azimuth - 3.5°
	Elevation - 8°
	Range -65m
Interfaces	Ethernet- 2 Ports (10/100/1000)
	I/O- 5 (Open/Ground)
Tracked Targets (Max.)	100 - Track While Scan
Noise disturbance	< 60dB at 10 meter distance
Electricity	
Power Consumption (Approx.)	700W
Operating Voltage	28/48VDC

Battery bank	Lithium gel 48Vx100AH
Operating time on battery	~ 6 hours
Physical Data	
Dimensions (H x D x W)	Antenna - 120 x 80 x 22 cm
Total Weight	70 Kg
Environment of Operation	
Operating Temperature	-30°C to +55°C
Storage Temperature	-30°C to +65°C
Humidity	5% - 95% non-condensing

*Specifications are subject to change without prior notice
Ver. 1.00.05.20

Table 1:

Maximum range per threat up to in Km	
Small UAV (Drone)	10 Km
Pedestrians (people)	20Km
Fighter jet (Low RCS)	35Km
Medium size UAV	45Km
Helicopter	45Km
Cars, Van and Vessel	45Km
Fighter jet	65Km
Large size vessel	80Km
Jet aircraft (A380)	165Km