



PRECISION APPROACH RADAR

PAR 2090C is a coherent X-band, ground controlled Precision Approach Radar (PAR), designed to provide detection of targets in clutter conditions, automatic tracking of at least 32 targets, control of up to 8 landing directions with automatic antennas relocation.

With a modular and open architecture and extensive use of COTS components, PAR 2090C offers reduced maintenance costs and easy growth capabilities.

PAR 2090C operates in all-weather conditions thanks to excellent signal processing clutter rejection. The radar provides accurate target position and discrimination to a high resolution display console, remotely controlled. With a field-of-view of up to 12° in elevation and up to 30° in azimuth, the radar performances exceed ICAO requirements.

The entire radar head is integrated in a single shelter.

The mobile version is equipped with sliding shoes and auxiliary wheels and can be transported by a C130 aircraft. The PAR 2090C system provides additional capabilities such as meteo maps and surveillance mode.

Currently, the company holds a key market position for PAR systems. In fact the PAR 2090C has a long track record of installations started at the beginning of '80s all over the world. So far more than 100 systems have been provided to National and International Air Forces, such as France, India, Brazil, Switzerland.

PAR 2090C is available in two models:

- PAR 2090CF (Fixed) sheltered and easy transportable by truck
- PAR 2090CM (Mobile) compact, rapidly deployable and transportable onboard of C-130.

PAR2090C

TECHNICAL FEATURES

Radar Head shelter and Operator shelter

Shelter ISO	7540mm x 2438mm x 2330mm ISO corner fitting
Weight	<12,500Kg (Radar Head shelter)
Operative temperature range	-25°C to +45°C
Storage temperature range	-35°C to +58°C
Relative humidity	Up to 100%
Compliant to MIL STD 810E methods	505.3, 506.3, 521.1, 509.3, 510.3
EMI/EMC as per MIL STD 461E	
Power	400VAC and 230VAC 3 phases
Data transmission link between Operators room/Radar Head	F.O., Telephone cable



Radar Performance

	ICAO requirements	PAR 2090C
Azimuth resolution	1.2°	<1.2°
Elevation resolution	0.6°	0.6°
Range resolution	120m	<120m
Azimuth accuracy	0.6R + offset	0.6R
Elevation accuracy	0.4R + offset	0.4R
Range accuracy	30m+3%R	30m
Normal weather range scale		20.5nml
Heavy rain range scale		10nm to 17nm

Man Machine Interface

- Friendly configurable HMI
- TFT displays in various sizes
- Soft keys controls
- Touch screen capability
- Recording system
- Training mode
- Online system help.



KEY POINTS

- Multiple landing control
- Fast runways changes
- Track-while-scan
- Fully coherent transmit/receive system
- Excellent clutter rejection
- Excellent accuracy and discrimination
- Multiple radar modes to optimize waveforms in different weather conditions.
- Fully redundant RT/TX/PX/data transmission
- High availability and reliability
- Easy maintenance and low support cost feature
- Clutter mapping and synthetic representation.

