



LEONARDO Germany GmbH

METEOR 2000C

SOLID-STATE WEATHER RADAR



TECHNICAL DATA

| | |
|---|---|
| Mode | Doppler, Dual-Polarization |
| Operating Frequency Range | 5400 – 5900 MHz (C-Band) |
| Typical Operational Range/ Technical Range | 200 km / 600 km |
| Maximum Doppler Velocity | ± 128 m/s |
| System Phase Stability | ± 0.05° |
| Transmitter Type | Independent GaN Solid State amplifier modules for each polarization |
| Peak Power | 8 kW (2x4 kW) and 16 kW (2x8 kW) recommended; 4 kW and 32 kW optional |
| Noise Figure (Total Receiver) | ≤ 2.0 dB |

METEOR 2000C SOLID-STATE WEATHER RADAR

The METEOR 2000C weather radar sets the benchmark in weather radar technology and cost effectiveness. The system is particularly suitable for meteorological services covering moderate distances and precipitation conditions in mid-latitude regions like Europe, North America and northern Asia. The METEOR 2000C combines cutting-edge technologies with straight-forward and reliable implementation at the performance level of legacy tube-based Klystron radars. The system is supplied with GDRX® 6 Digital Receiver & Signal Processor and the latest pulse compression technology. Rainbow® 5, the most up-to-date radar software package for meteorological users will be provided to ensure optimum data quality. The results are accurate measurement of rain rates, precise detection of severe weather phenomena as well as tracking and nowcasting of such events.

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METEOR 2000C HIGHLIGHTS

- State-of-the-art solid-state technology
- High-end Doppler weather radar with configurable transmitter power levels
- Flexible in Design and Performance
- Dual pulse frequency diversity blind range recovery
- Cabinet-mounted transmitter and receiver electronics, supporting easy calibration, maintenance and efficient cooling
- Graceful transmitter degradation
- Pulse compression waveform optimized to minimize the impact on measurement accuracy
- No radome climatization needed
- The system design is fully upward compatible with the wide-spread and field-proven tube-based radar designs from Leonardo, facilitating easy and straightforward upgrades of legacy tube radars to solid-state at a latter point in time.