

## TECHNOLOGY LEADER IN WEATHER RADAR SYSTEMS

SELEX-Gematronik is the world's leading manufacturer of cutting-edge weather radar technology. Our products offer customers the best-in-class C-, S- and X-Band weather radar systems available today, using either magnetron or klystron transmitters. We constantly strive to innovate by participating in research and development programs in close cooperation with key meteorological service providers and universities. As a result our products are always at the forefront of meteorological research.

Our depth of experience speaks for itself. Over the last decade we have delivered more than 200 state-of-the-art METEOR weather radar systems to key meteorological service providers in over 50 countries worldwide. Today SELEX-Gematronik belongs to SELEX Sistemi Integrati SpA, a fully-owned subsidiary of Finmeccanica, Italy.

### OUR PEOPLE HIGHLY QUALIFIED EXPERTS WITH COMPLETE SYSTEM ENGINEERING KNOW-HOW

SELEX-Gematronik employs more than 100 people at its facilities in Germany. The majority of our employees are masters-educated engineers and skilled technicians with complete system engineering know-how. Our skills and expertise enable us to create cost-effective system architectures tailored to the specific needs of individual customers.

### OUR PRODUCTS METEOR

Our unique line of METEOR radars is the backbone of SELEX-Gematronik's high-end weather radar systems. METEOR's sophisticated modular design means we can offer a wide range of individual systems that meet the specific needs of different users within the meteorological community.

We are the only supplier of weather radars with the full design rights and expertise for all radar components. Consequently our radars benefit from a compact design and deliver unparalleled performance and reliability.

We supply both magnetron and klystron transmitters, and have pioneered the introduction of S-Band klystron technology to meteorology. Setting the standards at the top-end of meteorological radar systems, SELEX-Gematronik equips its systems with GDRX®, a 14 Bit dual-channel Dynrex technology based digital receiver for high resolution and realtime data acquisition. Proven simultaneous dual polarization technology is available for all METEOR systems, both in conventional and receiver-over-elevation configuration. METEOR radars have been designed for unattended operation and are renowned for their reliability and long life. Minimal



maintenance and low down-times are secure credentials, which underpin METEOR's excellent reputation.

### PROPRIETARY SOFTWARE

SELEX-Gematronik boasts a comprehensive portfolio of proprietary software for optimal control and visualization of radar data:

- **Rainbow®** is the most comprehensive and advanced sensor management system available today. It is designed to guarantee the generation of a broad selection of meteorological products and ensures optimum adaptation to individual application requirements.
- **Ravis®** is a user-friendly and versatile radar control visualization tool. It works in realtime allowing for simple and transparent task management. It can be used either onsite or from a remote location.
- **Racon®** provides the basis for a comprehensive and functional radar control and monitoring.
- **Analyst®** provides long term database logging and graphical post analysis capability of all status information provided by the radar system

Our software products support the complete integration of radars in heterogeneous networks. Due to their architecture, maintenance work can be performed from remote workstations by either the customer or by our engineers at SELEX-Gematronik in Germany.



### CUSTOMIZED SOLUTIONS

Individual needs require individual solutions - especially in the case of capially intense projects and fully comprehensive services, where the extensive transfer of knowledge to the customer is critical to success.

Based on our proven expertise, SELEX-Gematronik is in a position to offer a wide range of professional services and solutions including:

- Radar site analysis
- Worldwide maintenance services
- Spare parts management
- Training
- Meteorological system integration
- Innovative financing options

We believe in providing intensive consulting services at every stage of a project, a practice that contributes strongly to SELEX-Gematronik's reputation as a leading turn-key provider of complex meteorological sensor networks.

### SUPERIOR QUALITY TO MEET CUSTOMER NEEDS

SELEX-Gematronik was the first manufacturer of weather radar systems to implement quality management procedures. Our quality management system was first certified according to DIN EN ISO 9001 in 1996, and has successfully completed ISO recertification procedures ever since.

To support continuous growth and improvement of quality, cost-efficiency and customer satisfaction, SELEX-Gematronik pursues a number of initiatives that demonstrate excellent performance. Besides technological innovation and superior service quality, we ensure the rapid implementation of EU-directives. For example we are the only supplier of weather radar systems to comply RoHS Directive 2002/95/EC, which restricts the use of hazardous substances in electronic equipment. This directive is mandatory for all European companies and institutions.

### APPLICATIONS AND USERS

SELEX-Gematronik weather radars cover a wide spectrum of applications for meteorological services, departments and

units. METEOR radar systems are designed for mesoscale weather surveillance, forecasting and nowcasting, as well as for meteorological research and data collection.

Our products are relied on by:

#### Meteorological Services

Our products support short-term nowcasting and logging of meteorological phenomena. They provide civil protection managers with timely and accurate data to support decisions on the issue of alerts and the implementation of preventative action in cases of severe weather approaches or imminent flooding.

#### Air Traffic Control Authorities

Our products support the guidance of aircraft through difficult meteorological environments both during take-off and landing and en-route, thus ensuring safe flight conditions.

#### Land and Vessel Traffic Authorities

Our products serve the travelling public and the transportation industry with information on rain, hail, snow, winds and floods.

#### Hydrological Institutions

Our products aid hydrological studies and the management of water resources, both for water supply and hydroelectric power generation by providing early information on rainfall over watershed areas.

#### Agricultural and Forestry Institutions

Our products aid the short-term planning of sowing, irrigation, the usage of fertilizers or insecticides and harvesting, as well providing flood warnings.

#### Research Agencies

Our products support atmospheric research on regional climates and climate change.

Together with the meteorological product software Rainbow®, METEOR is the first choice remote sensing system for the leading institutions in the wide field of meteorology.

