

M-LAT

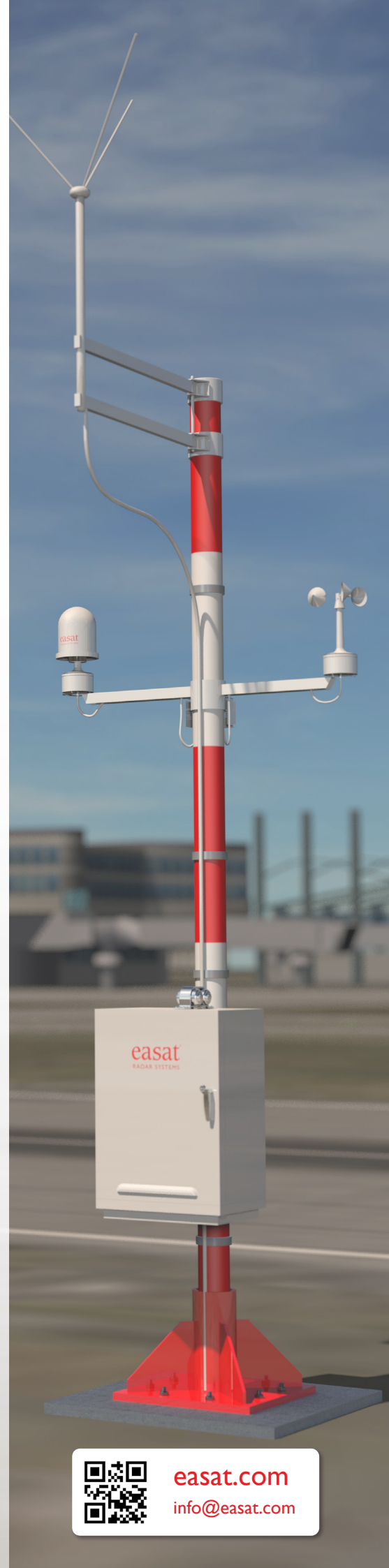
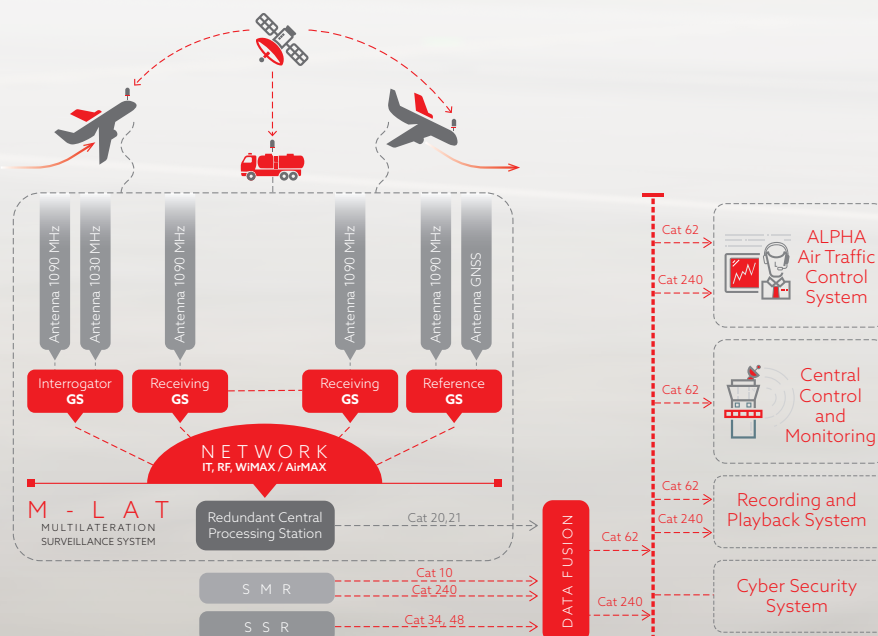
MULTI-LATERATION RADAR SYSTEM

Easat's MLAT System meets all ICAO and EUROCAE Standards and is intended to provide Cooperative Surveillance of Aircraft and Vehicles.

The Systems can easily be expanded to provide seamless Coverage from the ground to En-Route Airspace through the addition of Remote Ground Stations, without the need for Additional Processing Hardware

Being a key Subcomponent in applications ranging from Advanced Surface Movement Guidance and Control Systems (A-SMGCS) to nationwide Air Traffic Management systems, MLAT provides:

- High Precision Passive Surveillance
- Accurate Real-Time Position of all Objects Equipped with a Mode A/C/S, ADS-B Transponder in all Weather Conditions
- ADS-B Data Processing
- Relevant Identification of Targets
- Track Reports Delivery to External Systems
- System Status Reporting
- Suitable for Integration to an A-SMGCS System
- Tailored Spares, Maintenance & Upgrade Packages available



- Cost-Effective and the Most Accurate Ground Surveillance System
- Meets Current and Future Air Traffic Management Needs
- Independent Surveillance – Own Measurement of Position
- Stable Accuracy and High Position Update Rate
- Full Integration WITH ads-b Systems
- Supports Surface Movement Applications
- Improves Situational Awareness through Aircraft Derived Data;
- Uses all Existing Avionics: Mode A/C, Mode S and ES
- Own Mode A/C/S Interrogator;
- No Dependence on GNSS - Own Transceivers used for Time Synchronisation
- Great Flexibility and Scalability due to Modular Approach
- Ability to Communicate Internally using a Variety of Available Link Technologies
- Simple Coverage Expansion
- Rapid Deployment
- Low Ground Equipment Costs
- Suitable for Operation in the Most Difficult Environments
- Minimal Number of Components;
- Multiple Levels of System Redundancy
- High Availability through the Implementation of NI/N-2 System Design
- End-to-End Testing, Remote Control and Monitoring of the System down to LRU Level
- Low Maintenance
- The Lowest Life Cycle Costs

Specifications*

Parameter	Ground Station (GSR)	Ground Station (GST)	Reference Ground Station (RGS)
Mode	Receive-Only	Receive and Transmit	Receive and Transmit
Functions	Detects, Time Stamps, Processes Target Messages	Detects, Time Stamps, Processes Target Messages Elicitation of Replies from Targets using 1030 MHz Interrogations	Detects, Time Stamps, Processes Target Messages Distribution of Reference Timing Information throughout the System via 1090 MHz Signals
Main Components	1090 MHz Receiver UPS/Battery Backup Network Equipment	1090 MHz Receiver 1030 MHz Transceiver UPS/Battery Backup Network Equipment	1090 MHz Receiver 1030 MHz Transceiver UPS/Battery Backup Network Equipment
Typical Power Consumption	25 W	100 W	50 W

Number of Data Output Interfaces	2 x Ethernet Network Technologies for Further Data Transmission – in Accordance with the Requirements of the Customer	Receiver Sensitivity	-91 dBm for Mode A/C/S
Autonomy	> 1 Hour	Update Rate	Not more than 1 sec
Operation Temperature	-40 °C ... +55 °C	Horizontal Position Accuracy on the Runways	Within 7.5m with confidence of 95% Within 12m with confidence of 99%
Operation Humidity	95% Non-Condensing	The maximum delay in the processing of informant	Not more than 1 sec
Enclosure IP Rating	IP66 robust outdoor enclosure	Number of Simultaneously Processed Targets	Not Less than 250
MTBF	> 20,000 Hours		
MTTR	< 30 Min		
Availability	0,9999		