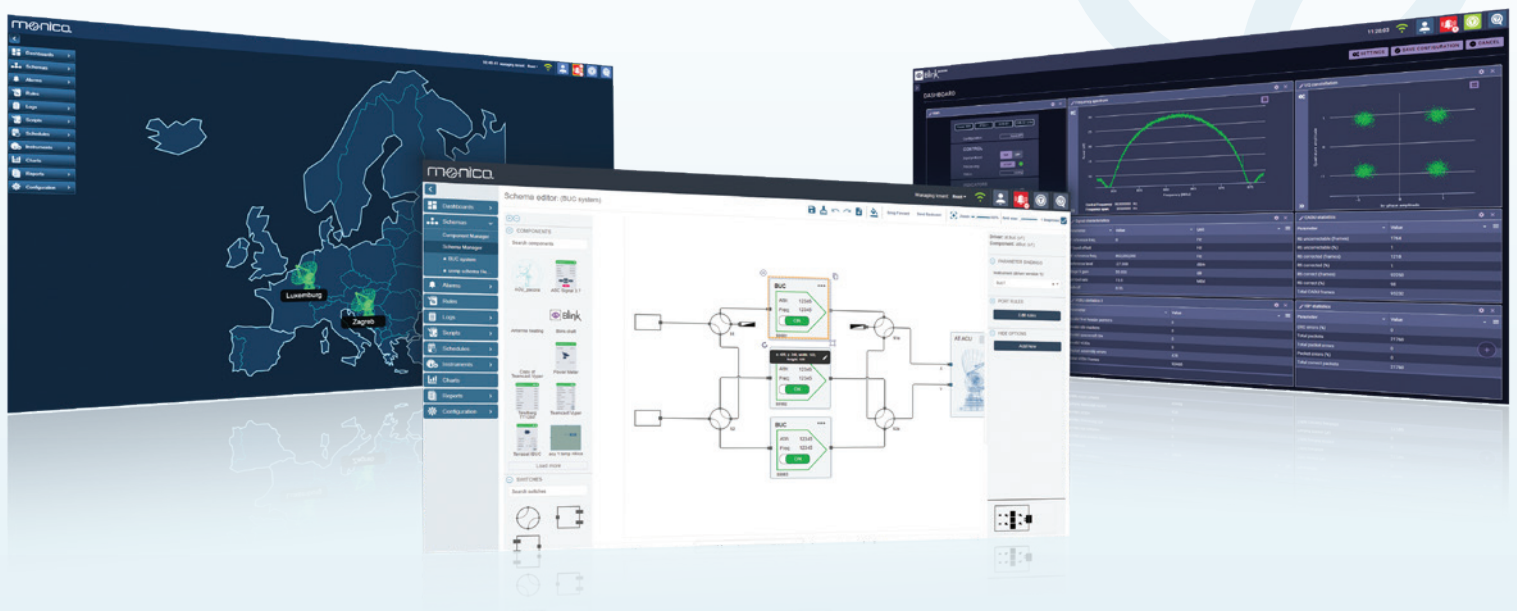# MONICA is a state-of-the-art ground station monitor and control solution, built primarily for the satellite industry.

Over the last 20+ years, Amphinicy has acquired in-depth knowledge and experience in **delivering M&C solutions** to some of the most demanding customers in the world.

Our solution, MONICA is **robust**, **secure and reliable**, demonstrates high performances and is **able to scale** to any size of the customer service.

monica.amphinicy.com

Main features

- White-label, fully customizable M&C system
- Can be used as a stand-alone application or a framework for building more complex solutions
- A multi-tenant system with tight security and user management
- HTML5 responsive web interface supports major modern web browsers
- Supports distributed and hierarchical deployments

- Built on the leading open-source technologies, no need for additional licenses
- Runs virtually anywhere from on-premise hardware to cloud infrastructure
- Scalability - supports 10 to 100.000+ instruments
- Simple configuration backup and restore
- Customizable look and feel with theming system
- Path and signal highlighting

Advanced automation

- Automatic Redundancy Switching
- Site Diversity Switching
- Automatic Level Control
- Macro recorder for user actions

Device management

- User-friendy, on-the-fly driver editor, no programming needed
- Integrated SNMP MIB browser and driver generator
- Supports a growing number of communication protocols (SNMP, REST, TCP/UDP ASCII/binary, Modbus, SQL, etc.)
- Distributed device data collection via lightweight Remote Agents
- Configurable polling times per parameter
- User-defined hard limits to prevent equipment and system damage
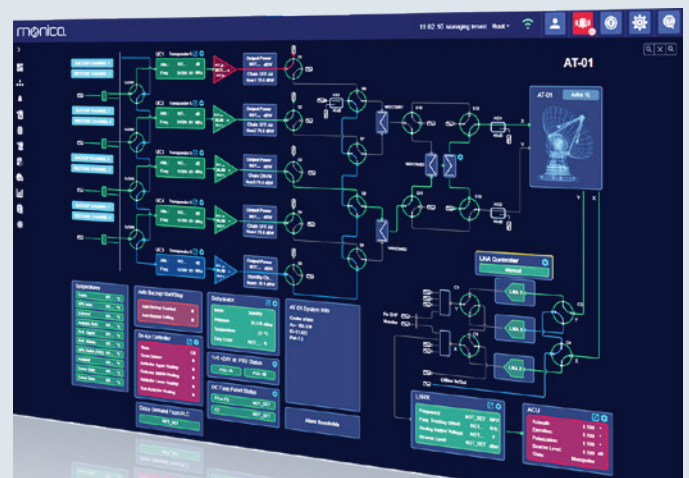
Technical specification

- Running on bare metal and docker based systems on RedHat & Debian based OS
- Accessible from any device supporting modern web browsers including tablets and smartphones
- High-availability / failover mode
- Data persistence via PostgreSQL DBMS and TimescaleDb / InfluxDb

Modular architecture

- Schema / Mimics with integrated drag and drop schema editor
- Flexible and rich dashboards with user-configurable widgets
- Custom, sophisticated action scripting via Python / Groovy
- Flexible trending with multiple charts types
- Rich and customizable reports
- Task automation (scripts, report generation), via scheduler or alarm-driven events
- Powerful alarming based on user-friendly rules definition and device-related constraints
- Simulation/Demo mode for easy instrument simulation
- Preset and configuration management database

Integration

- Integration with third-party directory services via CAS
- Extensive REST API for integration with third-party OSS / BSS systems

MONICA is a critical building block of any ground station.

AMPHINICY TECHNOLOGIES

www.amphinicy.com