

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

Over the last 18 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.





### 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

#### Intelligent add-ons

- Site diversity switching
- Uplink Power Control
- Preset and configuration management database
- Macro recorder for user actions

#### Device pollers

- User-friendy, on-the-fly driver editor, no programming needed
- Supports a growing number of communication protocols (SNMP, SCPI, REST, FTP, ASCII-based, etc.)
- 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
- 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

#### 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.



