DEGESAT Deutsche Gesellschaft für Satellitenkommunikation GmbH

Monitoring & Control Unit (MCU)

The MCU enables remote data acquisition, evaluation and control of a variety of external devices and sensors. Complemented with the unique world wide coverage of Iridium's satellites (pole to pole) and the reliability of operation in the L-Band frequency, it offers a key solution to corporate customers to monitor and control their appliances remotely and effectively.

Communication ports

Connectors
- 1x RS-485/RS-232
- 4x Analog inputs (ADC 10-bit or 8-bit)
- 4x Digital inputs/ 4x Digital outputs
- 1x LAN (GIG) (Optional type B)

Protocols
- I2C, SPI, SNMP, SSH, Telnet, TCP/IP

Connectivity

- L-Band Worldwide coverage Iridium network (Pole-to-Pole)
- Integrated TX/RX L-Band Antenna
- Hybrid GSM/GPRS (Optional Type B)

Out-of-Band Connectivity:Iridium

The Monitoring & Control Solution designed and engineered by DEGESAT combines Out-of-Band capabilities, covering pole-to-pole with an intuitive Over-the-Air configuration Portal. The MCU comprises of Iridium`s latest satellite connectivity module that dedicates a world-wide coverage.

DEGESAT`s Monitoring & Control Portal acts as a bridge between the customer`s needs and the MCU, The customer can simply configure, check commands and program the device Over-the-Air from any location Via the World wide web.

The MCU was designed to sustain harsh and extreme rural and Wet areas, enclosed in an IP-67 casing it is able to sustain under extreme situation.

To secure a fully optimized allocation of the device, the device`s portability and reliability in terms of ruggedness would allow its easy allocation in any way the iridium's signal is best.

DEGESAT`s out-of-band MCU connects to a din-rail enclosure that would serve as a connection terminal for connectivity options covered by the MCU.

iridium®

Iridium is the only provider of truly global satellite voice and data communications solutions with complete coverage of the entire Earth including oceans, airways and even Polar Regions. Iridium delivers reliable, secure, real-time, mission critical communications services to and from areas where landlines and terrestrial-based wireless services are either unavailable or unreliable. Iridium’s constellation consists of 66 low-earth orbiting (LEO), cross-linked satellites operating as a fully meshed network and supported by multiple in orbit spares. It is the largest commercial satellite constellation in the world.

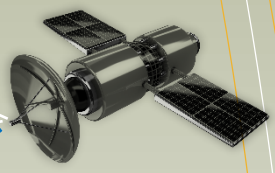
For more information, visit
www.iridium.com.

Out-Of-Band Industry Application Diagram

Monitoring & Control Portal (MCP)

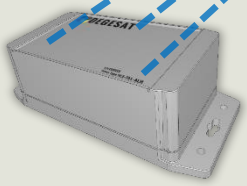
- Secure Web-Portal
- Graphical Data representation
- Custom Notification System
- Configurable Thresholds

DATA LOG SERVER



Iridium Satellite

Out-Of-Band Connectivity



Monitoring & Control Unit (MCU)

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Protocols

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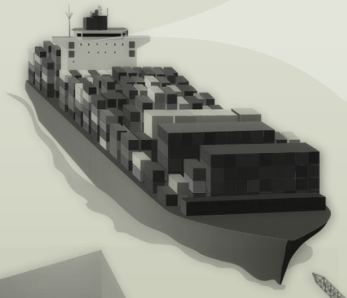
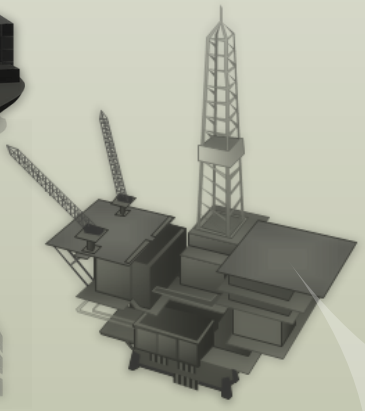
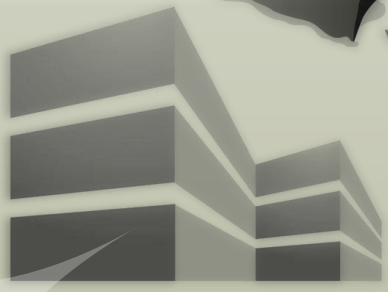
Maritime

- Level Sensors
- Flow Switches
- Tank Level Indicators
- Fleet Tracking/Managment







Corporate & Government

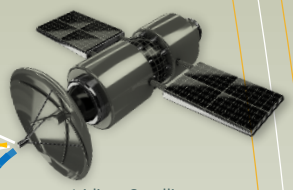
- Process control systems
- Security Configuration
- Private Secure Networking
- Emergency Connectivity

Oil & Gas

- Depth Tracking Sensors
- Identity Access Logs
- Contractor Data
- SCADA Pump/Valves

Out-Of-Band (VSAT) Application Diagram

DATA LOG SERVER



Iridium Satellite

Out-Of-Band Connectivity (VSAT)

Monitoring & Control Portal (MCP)

- Secure Web-Portal
- Graphical Data representation
- Custom Notification System
- Configurable Thresholds

Monitoring & Control Unit (MCU)

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Remote Controlled Power Socket

Antenna Control Unit

- Update ACU parameters on the fly
- Full telnet access
- ACU implementation eg.Intellian, Seatel.

Cisco Switches and Hardware servers

- Customizable SSH access with definable commands

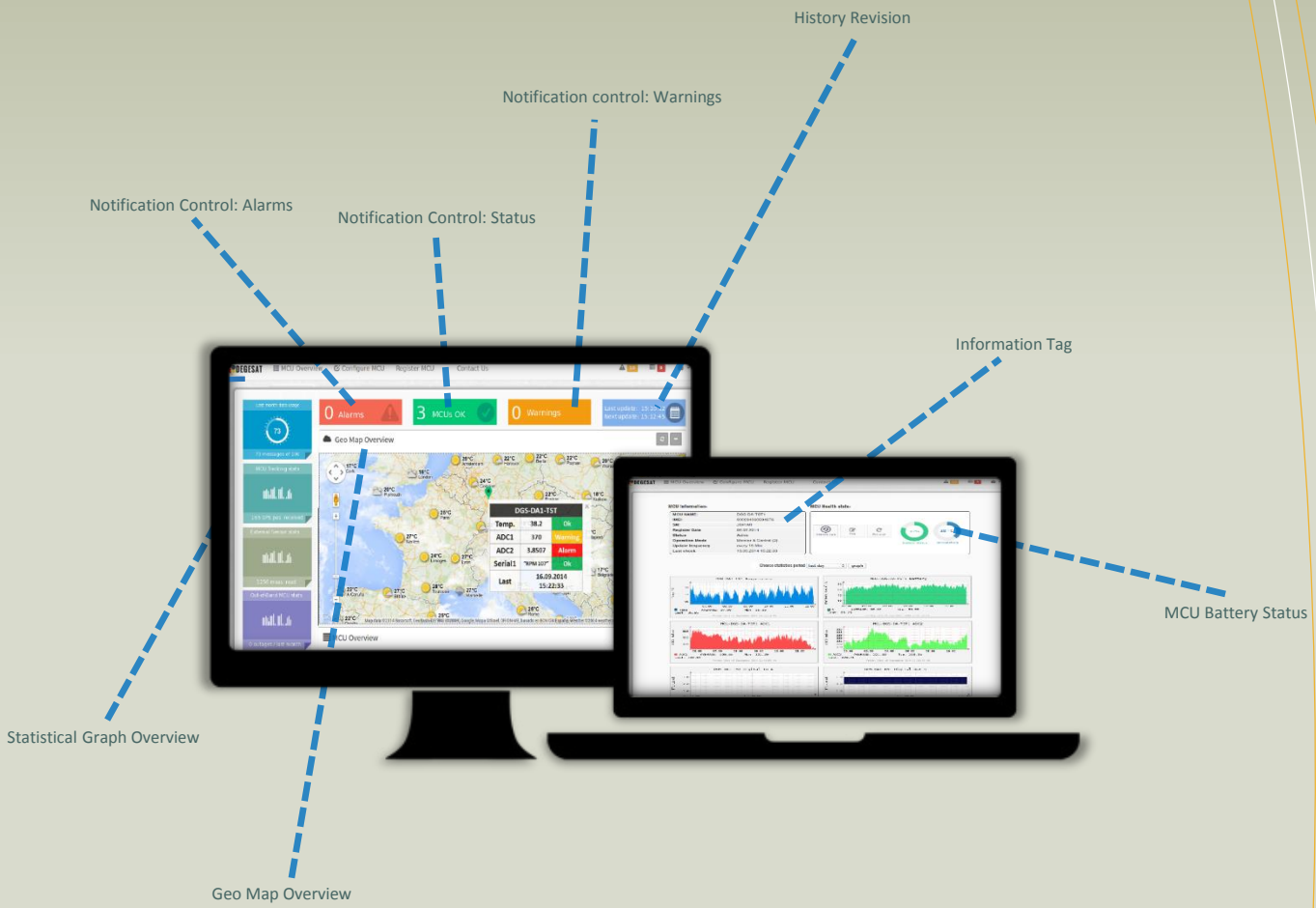
iDirect evolution x3 Modem

Newtec Modem

Comtech Modem

- Update option file
- Request modem status (uptime, RX and TX SNR values)
- Full telnet and SSH control

Monitoring & Control Portal (MCP)



Monitoring & Control Portal

Monitor & Control Portal (MCP) Web-based advanced user interface enabling remote configuration, commissioning, and operation of the MCU

Features

- Secure Web-Portal
- Graphical Data representation
- Custom Notification System
- Configurable Thresholds

About DEGESAT

DEGESAT Deutsche Gesellschaft fuer Satellitenkommunikation GmbH is a provider of Engineering Expertise and Solutions to the Corporate, Defence and Oil and Gas sectors, delivering the technology and expertise to ensure excellence in the value chain of its customers.
Founded in Berlin, Germany, DEGESAT has entered the market with a main focus on high quality and secure communications, building its success on the passion and exceptional talent of its engineers leveraging from its knowledge base and using an end to end approach.

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