Overview: AutoLog ControlMan gives the easiest way to realize Internet based SCADA system. It brings measurements and -controls from field devices to web browser. The service can be opened anywhere with normal web browser - without any software installations. Users just login to service to monitor and control their widely located remote assets. Same real-time field information can be shared with hundreds of colleagues around the world.

Operation: AutoLog ControlMan is complete solution which includes both programmable AutoLog GSM-RTUs (Remote Terminal Units) and hosted control room SCADA application service. AutoLog GSM-RTUs are installed along the remote assets to perform measurement- and control tasks. GSM-RTUs are communicating wirelessly through the GSM-/ GPRS network. AutoLog ControlMan service is used remotely with web browser through the Internet.

Benefits: No need for own control room SCADA server, dedicated operator workstations or maintenance staff. ControlMan is hosted and maintained as web service. No network investment costs. Service uses the existing and global GSM- and Internet communication networks. No need for expensive on-site maintenance visits. Software changes can be done remotely. No need for special knowledge. Service includes application maintenance. No headache – just login!

- No server HW
- No SW installation
- No maintenance
- No security risks
- No cables
- No travelling
- No headache

✓ Just login!
✓ Full control
✓ Pease of mind
AutoLog® ControlMan™ (Cloud SCADA)

Key Features

**Server hosting**
By default, ControlMan is offered as hosted web service. The default hosting company is Verio, which has been chosen as the world’s most reliable Internet hosting company several times. (e.g. year 2010). Optionally ControlMan can be installed to customer’s server, in this case FF-Automation needs at least temporarily opened remote desktop connection to the server for setup and maintenance purposes.

**Application maintenance**
By default, FF-Automation maintains the ControlMan application on the web server, but optionally customers can also be trained for independent application maintenance. Application is remotely maintainable so there’s no need for expensive on-site visits for adding new GSM-RTUs, views, users, features etc.

**Communication between ControlMan server and GSM-RTUs**
ControlMan communicates with GSM-RTUs in the field using SMS and GPRS. SMS communication is bidirectional. SMS messages are routed between GSM- and Internet networks. GPRS communication is used to send data from controllers to ControlMan.

**Application views**
Dynamic Google Map - view shows GSM-RTUs' locations and status information. Alarm view shows all or filtered alarms. Alarms can be acknowledged. User can configure alarm limits.
Trend view shows current and historical trends. Supports multiple bar- and line trends in one object.
Dynamic process view shows freely configurable animated graphics and measurement values.
Reports, dynamic process images, parameter setups, SMS & e-mail alarm forwarding, etc.
Easy browsing between views using expandable tree structure.
Allows fast and easy way to copy and paste views, objects, GSM-RTU configurations etc.

**User groups**
Supports configurable user levels for group of views, views and objects.

**Database**
ControlMan stores all measurements, alarms and GSM-RTU configurations to SQL database. Database can be read to own PC for backup, off-line analysis, report or other purposes.

**SMS- and e-mail alarms**
User selected alarms are forwarded using SMS messages or e-mails.

**User interfaces**
Application can be opened from any PC or mobile device, which has Internet connection and Flash support. User interface operates through web browser. There can be tens of simultaneous users.

**Applications**
Remote monitoring and controlling of "any" facilities e.g. cathodic protection systems, tank levels, street light control & dimming (energy saving) systems, integrated OEM solutions, pump stations, real estates, devices and machines, facility condition alarming, environmental monitoring, groundwater etc.

**Pricing**
ControlMan service price includes initial setup costs, GSM-RTU hardware cost and annual / monthly maintenance costs per GSM-RTU

AutoLog GSM-RTUs (Remote Terminal Units)

<table>
<thead>
<tr>
<th>Key Features</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Controller types</strong></td>
<td>All AutoLog GSM-RTUs: GSM-4, GSM-8, GSM-16, GSM-10SP, GSM-20, GSM-GW, GSM-LP. The GPRS and SMS message formats are open and freely available so 3rd party GSM-RTUs can be connected to the ControlMan service.</td>
</tr>
<tr>
<td><strong>I/O types</strong></td>
<td>Analog inputs (AI) and outputs (AO), Digital inputs (DI) and outputs (DO), counters. I/O quantity depends on controller types. There are over 20 selectable analog input modules (4..20mA, Pt100, etc.)</td>
</tr>
<tr>
<td><strong>Modbus interface</strong></td>
<td>All AutoLog GSM-PLCs have 2 serial ports. Ser1 is used by GSM modem, but Ser2 is freely usable. Ser2 can be used as Modbus master/slave over RS-232, RS-485 or TCP/IP or with AutoLog wireless sensors. GSM-LP ser2 is only used for programming.</td>
</tr>
<tr>
<td><strong>HMI interface</strong></td>
<td>AutoLog GSM-PLCs can be equipped with HMI (not GSM-LP)</td>
</tr>
<tr>
<td><strong>Low power modes</strong></td>
<td>AutoLog 4, 8 and 16 GSM-PLCs support low power modes which allows it to wake up, power up the sensors, do measurements, send measurements and go back to sleep mode. Configurable timing between wake ups. GSM-LP is especially designed for low power applications.</td>
</tr>
<tr>
<td><strong>PLC program</strong></td>
<td>AutoLog GSM-RTUs are freely programmable i.e. same way as normal PLCs. It can be programmed to make automatic I/O controlling, clock- and calendar controls, alarm handling, logging etc.</td>
</tr>
<tr>
<td><strong>Accessories</strong></td>
<td>Outdoor or indoor enclosures using plastic, polyester or stainless steel. Antennas, power, accumulator, terminal blocks, fuses, relays etc. i.e. ready solution for your application. We can also supply level-, temperature-, pH-, oxygen-, turbidity-, conductivity-, voltage-, current- etc. sensors for your application.</td>
</tr>
</tbody>
</table>