Introduction

AutoLog CP GSM-RTU gives compact and high specification solution for the remote monitoring of the healthiness of the pipeline’s CP rectifiers.

AutoLog CP GSM-RTU is based on rock solid AutoLog technology. FF-Automation has manufactured AutoLog automation products in Finland since 1976. AutoLog GSM-RTU devices and cathodic protection are our main business areas.

**CP GSM-RTU Specifications**

- **Enclosure:** Stainless steel IP65 with optional sunshade
- **Mounting:** side of pole or wall installation kit.
- **Power input:** 230 VAC, optional 115 VAC or others
- **GSM / GPRS:** Embedded 850/900/1800MHz modem with outdoor antenna
- **Serial port #2 connectivity:** Modbus RTU master / slave, Modbus TCP or RS-485 requires optional plugin module.
- **HMI (I²C port):** Character based LCD, indication LEDs and keypad
- **Clock and calendar (RTC):** Build-in
- **Memory:** Program-Flash, Data-RAM
- **Back-up battery for RAM and RTC:** Yes
- **Support for wireless sensors:** Yes (Needs optional WSN master module)
- **Supplementary:** Fuses, switches, screw terminal block

<table>
<thead>
<tr>
<th>Analog Inputs</th>
<th>Digital Inputs</th>
<th>Relay Outputs</th>
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</thead>
<tbody>
<tr>
<td>GSM-8 type has 2 AI</td>
<td>GSM-8 and GSM-16 have 4 DI, 24VDC, max 8mA, opto-isolated, PNP</td>
<td>GSM-8 has 2 RO, GSM-16 has 4 RO 5A/250VAC 1A/30VDC</td>
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<tr>
<td>GSM-16 type has up to 8 AI 0-100V (CP rectifier voltage)</td>
<td>GSM-8 has 2 DO, GSM-16 has 0 DO, 24VDC, max 2A, NPN</td>
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<tr>
<td>0-50mV (CP current measurement over shunt resistor)</td>
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<td>0-400mV (CP reference potential)</td>
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<tr>
<td>Uses Isolated AutoLog Any to 4..20mA transducers. See separate datasheet!</td>
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**On-board I/O**

**Environmental and size**

- **Storage temperature:** -40 ~ +80 ̊C
- **Operating temperature:** -30 ~ +70 ̊C
- **Relative humidity:** 95%, non-condensing
- **EMC:** Immunity according to EN50082-2 & EN50082-1 Emissions according to EN50081-1 & EN50081-2
- **Enclosure:** IP65 stainless steel
- **Dimensions (W x H x D):** 300 x 300 x 150 mm Without sunshade
- **Weight:** About 7 kg
- **Mounting:** Side of pole, wall

Special design for cathodic protection rectifier monitoring.

3-way isolation of analog inputs

High temperature operation

Embedded HMI operator panel

Supports AutoLog®

ControlMan™

Cloud SCADA

PLCs since 1976
**Main Features:**

- DC voltage and current measurements from Cathodic Protection transformer rectifier + opt. pipe-to-soil measurement. All inputs has 3-way isolation 1500 VDC.
- AC presence detection (Optional), Door alarm (Optional).
- IP65 Stainless steel enclosure with optional sunshade.
- Rock solid GSM communication using (GPRS and SMS).
- HMI allows local monitoring of CP parameters etc.
- Over 1.000 similar GSM-RTU and ControlMan installations.
- ControlMan Cloud SCADA receives and stores data to SQL database. Hosted server system has 24/7/365 maintenance and data backup plan and guaranteed availability ratio.
- ControlMan shows CP site map locations, measurements, alarms, trends, reports etc. via secure Internet connection to multiple simultaneous users.
- ControlMan can forward alarms and reports to mobile phones and e-mails.
- Complete system maintenance (GSM-RTU and SCADA) can be done remotely over Internet- and GSM networks.