

e-Sense Telemetry Modem



e-Sense Telemetry Modem a telemetric system with integrated datalogger with barometric & temperature sensors that fit inside 2-inch wells for a hidden and secure direct, remote monitoring solution.

Safe, reliable, remote monitoring with data transmitted directly to a PC

Benefits

- Long battery operating life with low battery alarm
- Extremely low maintenance
- Easy installation in the field, configuration from a PC in your office
- Supports e-Sensors & DIVER®
- Supports analogue input 4 – 20 mA / 0 – 5 volt (flow meter, pH sensor, pressure sensor)
- Internal barometric compensation
- Data transfer by GPRS or SMS, via e-mail
- Send Interval from 15 minutes to 40 days
- Links to Diver-Office software
- Data held in MON or CSV files
- NTP support, clock synchronisation through the internet
- Ideal for small or large projects
- Alarm function
- Data security and reliability through use of data redundancy.

e-Sense Telemetry Modem

Technical specifications:

| | GPRS/email functionality | SMS functionality |
|-------------------------------|--|--|
| Message mode | email GSM/GPRS Quad band (900-1800/950-1950 MHz) | SMS (GSM Quad band) |
| Number of sensor ports | 2 Port 1 e+ sensor / Diver (external) Port 2 internal baro sensor Port 3 analogue sensor (external) (4..20 mA or 0..5 V) | 2 Port 1 e+ sensor / Diver (external) Port 2 internal baro sensor Port 3 analogue sensor (external) (4..20 mA or 0..5 V) |
| Temperature (range) | -20 ... +50 °C | -20 ... +50 °C |
| Memory capacity | Max. 15000 log intervals | Max. 15000 log intervals |
| Measuring frequency | 1 min. and 99 hours | 1 min. and 99 hours |
| Integrated barometer | Optional. For barometric Diver compensation Measuring range 400 ... 1150 mbar Accuracy baro sensor max. 0.5 cm Resolution baro sensor 0.1 mbar (cm) Data storage in monitoring well modem | Optional. For barometric Diver compensation Measuring range 400 ... 1150 mbar Accuracy baro sensor max. 0.5 cm Resolution baro sensor 0.1 mbar (cm) Data storage in monitoring well modem |
| Integrated temperature sensor | Measuring range -40 ... +125 °C Resolution 0.01 °C Accuracy temperature 2°C | Measuring range -40 ... +125 °C Resolution 0.01 °C Accuracy temperature 2°C |
| Antenna | Quad band (900-1800 / 950-1950 MHz) Connector: bulkhead Dimensions pillar antenna 55 mm x 9.65 mm Other antenna types available on request | Quad band (900-1800 / 950-1950 MHz) Connector: bulkhead Dimensions pillar antenna 55 mm x 9.65 mm Other antenna types available on request |

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Functional specifications

| | GPRS/email functionality | SMS functionality |
|--------------------------|---|---|
| Time synchronisation | Modem clock synchronisation on initiative of monitoring well modem with NTP server | Modem clock synchronisation on initiative of monitoring well modem with e-SENSE direct |
| Real Time Clock | | Summer/winter time adjustable |
| Accuracy external logger | Equal to logger | Equal to logger |
| Accuracy internal baro | Equal to integrated baro sensor | Equal to integrated baro sensor |
| Accuracy analogue port | 10 uA / 2.5 mV | 10 uA / 2.5 mV |
| Alarm | Direct e+sensor (SMS & email) alarm when alarm value is exceeded (optional Diver alarm when using the integrated baro sensor) | Direct e+sensor alarm when alarm value is exceeded (optional Diver alarm when using the integrated baro sensor) |

Power supply

| | GPRS/email functionality | SMS functionality |
|-------------------|--|--|
| Voltage | 3.6 V | 3.6 V |
| Battery | Art. no. 11.31.25, replaceable by user | Art. no. 11.31.25, replaceable by user |
| Battery life time | > 10 years with the use of email | With SMS > 2 years |

Housing

| | GPRS/email functionality | SMS functionality |
|------------|---|---|
| Dimensions | Diameter tube = 48.3 mm, diameter top = 60 mm, length tube = ca. 340 mm | Diameter tube = 48.3 mm, diameter top = 60 mm, length tube = ca. 340 mm |
| Protection | IP67 | IP67 |
| Material | Housing stainless steel 304, top POM | Housing stainless steel 304, top POM |
| Weight | Ca. 1750 gr. | Ca. 1750 gr. |

NB. SIM card exchangeable by user.

Options

| | |
|----------------|--|
| 11.31.15.01 | Monitoring well modem with internal baro sensor |
| 11.31.15.02 | Monitoring well modem with analogue port |
| 11.31.15.02.01 | Adaptor plug for analogue sensor |
| 11.31.15.04 | Monitoring well modem with data redundancy (data sent double for improved data security) |