

# FACT SHEET

## 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.

### 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

## Monitoring Well Modem Fact Sheet continued

### Functional specifications

	<b>GPRS/email functionality</b>	<b>SMS functionality</b>
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

	<b>GPRS/email functionality</b>	<b>SMS functionality</b>
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

	<b>GPRS/email functionality</b>	<b>SMS functionality</b>
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)