

# The PRO300 & PRO400 Modems

Your gateway to environmental data



Introducing the PRO300 and PRO400: Royal Eijkelkamp's latest monitoring well modems that empower precise, secure, durable, and hassle-free field data collection. Its advanced network compatibility supports a wide range of cellular networks, including 4G, LTE-M and NB-IoT networks with 2G fallback. Maintenance efforts are minimised by the option to choose between primary lithium batteries for a 10-year lifespan or alkaline batteries for 3 years, both capable of 24-hour reporting.

The built-in real-time clock, temperature sensor, and optional barometric pressure compensation feature enhance measurement accuracy. Customisable alarms guarantee real-time responses through SMS, email, or FTP.

The modems seamlessly integrate with Royal Eijkelkamp's **ROAK data portal**, simplifying data management, analysis, and visualisation, thereby enriching the decision-making process.

## PRO300

Designed for perfect compatibility with the **Diver Water Level Logger**, this modem can recognise when a Diver is connected and which model it is, for automatic configuration.

## PRO400

Designed for **multi-sensor compatibility**, the Prime PRO400 facilitates easy integration with existing sensor networks. With its multiple communication port options and protocols, the modem can be used for diverse connections and devices, even third-party sensors.

## Technical specifications

Item	Specifications
<b>Housing</b>	
Dimensions (without antenna and other auxiliaries)	Ø 48 mm x 480 mm (approximately)
Environment	-25°C / +70°C Humidity max. 95% non condensation IP68
<b>Modem</b>	
Modem IC type	4G LTE cat. M1/NB-IoT with 2G fallback. Or certified for Japan and South Korea: 4G LTE cat. M1/NB-IoT – no 2G fallback Optional eSIM.
Antenna	Stubby antenna (IP67) or external antenna
Bluetooth	BLE module built in, SIG v5 qualified
<b>Data collection</b>	
Operation mode	Up to 8 programmable events/day; data transmission, SMS transmission or TCP/IP connection
Datalogging	Automatic
Flash memory	Solid state flash memory. 128 Mb (expandable on request), which allows for storage of more than one million single measurements.
Reading interval	Between 1 minute and 24 hours
<b>Data access</b>	
Remote	Full access
Data transfer	FTP or email data-sending
Communication	Realtime connection by TCP/IP
Connecting to Eijkelkamp platform	MQTT
Local data download	Bluetooth and other dedicated apps
<b>Alarms</b>	
Alarm messages triggered by field events via SMS/ e-mail or FTP data transmission, all customisable	
Alarms	by SMS or e-mail
<b>Log memory</b>	
Solid state flash memory	128 MB (expandable on request)
<b>Field interfaces</b>	
1x 0-10Vdc input	
1x 4-20mA input	
1x digital input (high frequency - pulse counter option)	
Protocols: ModBus, SDI-12, custom on RS485 or 232	
Data channels PRO300	1x Diver
Data channels PRO400	1x RS232 1x Diver (or RS485) 1x SDI-12 (up to 99 SDI12 devices can be connected)
<b>Power</b>	
Battery	3x 3.6 V D-size Primary Lithium (up to 10 years autonomy with 24 hr reporting) OR: 3x 1.5 V D-size Alkaline batteries (up to 3 years autonomy with 24 hr reporting)
External power	By gland or connector
Connector type sensor	Connector or cable gland
Sensor power supply	Adjustable 5 V or 12 V
<b>Barometric pressure compensation</b>	
Yes, by built in sensor; for the accuracy of measurements, particularly in applications like water level monitoring.	
<b>Real-time Clock &amp; Temperature Sensor</b>	
Yes, built in, to enhance data accuracy and context by providing time-stamped measurements and temperature readings.	
<b>Optional</b>	
Diver top-port connector (only) in case of sub surface installation and high water levels. Bottom is a blind cap.	

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