



### Key Features

- Designed for usage with the Diver water level logger
- PRO400 – can connect to 99 different sensors
- Seamless integration with our ROAK data platform
- Exceptionally long battery life
- Built-in barometric pressure compensation
- IP68 protection
- Communicates via 4G, with 2G fallback
- Optional Diver top-port connector (only) in case of bottom being submerged



Introducing the PRO300 & 400: Royal Eijkelkamp's latest monitoring well modems that empower precise, secure, durable, and hassle-free field data collection. The modem's advanced network compatibility supports a wide range of cellular networks: 4G, LTE-M and NB-IoT networks with 2G fallback. The modems seamlessly integrate with Royal Eijkelkamp's ROAK data portal, simplifying data management, analysis, and visualisation, thereby enriching the decision-making process.

The PRO range offers Plug & Play functionality, as it can independently determine whether and which Diver is connected.

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

Maintenance efforts are minimised by the option to choose between primary lithium batteries for 10-year lifespan or alkaline batteries for 3 years, both capable of 24-hour reporting.

### Application

- Remote monitoring
- Groundwater monitoring
- Restricted access sites

### PRO400 - Differences

The PRO400's available connection ports are:

- 1x RS232; 1x Diver (or RS485) & 1x SDI-12 ports

**Its multiple sensor port supports the possibility to connect to 99 SDI12 devices, a wide range of (3rd party) sensors.**



| Item                                                                                            | Specifications                                                                                                                                   |
|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Housing</b>                                                                                  |                                                                                                                                                  |
| Dimensions                                                                                      | Ø 48 mm x 480 mm (approximately)                                                                                                                 |
| Environment                                                                                     | IP68      -25°C / +70°C<br>Humidity max. 95% non-condensation                                                                                    |
| <b>Modem</b>                                                                                    |                                                                                                                                                  |
| Modem IC type                                                                                   | 4G LTE cat. M1/NB-IoT with 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 programable 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                                                                                   | Data transfer through API                                                                                                                        |
| Connecting to ROAK                                                                              | MQTT                                                                                                                                             |
| Local data download                                                                             | Not supported, only local change of modem/logger settings                                                                                        |
| <b>Alarms</b>                                                                                   |                                                                                                                                                  |
| Alarm messages triggered by field events via SMS/ e-mail or data transmission, all customisable |                                                                                                                                                  |
| <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 (supports 99 SDI-12 devices)                                                                           |
| <b>Power</b>                                                                                    |                                                                                                                                                  |
| Battery                                                                                         | 3x 3.6 V D-size Primary Lithium (up to 10 years with 24 hr reporting)<br>3x 1.5 V D-size Alkaline batteries (up to 3 years 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                                                                                                                           |

