



# ECOLOG-PRO 1NTR

TECHNICAL SPECIFICATIONS

Wireless temperature measurement sensor with internal probe for elproCLOUD & elproMONITOR

ECOLOG-PRO 1NTR is an easy and versatile solution to monitor your valuable materials stored in refrigerators, freezers or ambient conditions. Battery-operated and wireless, the 868 MHz (Europe, UK, Singapore) or 915 (USA, Australia/New Zealand) radio band provides excellent reach. Set-up is easy and only takes a few minutes. Simply register the sensor on your elproCLOUD account or your elproMONITOR installation, pair it to an ECOLOG-PRO RBR (radio bridge) communication module, and place it in your room or equipment. A reliable internal storage capacity for thousands of measurements ensures all your valuable data are sent to elproCLOUD or elproMONITOR. Should the connection between the ECOLOG-PRO 1NTR and the radio bridge be temporarily lost, the sensor will automatically search for another radio bridge within range. The elproCLOUD web application aggregates all your sensor data to provide a convenient, comprehensive overview, sending out alerts if alarm limits are breached. ELPRO's industry-leading software elproMONITOR, integrated into your IT infrastructure and database, monitors hundreds or even thousands of monitoring points with wired or wireless sensors.



we prove it.

SWISS QUALITY



- > Monitors your valuable goods in rooms, refrigerators or freezers
- > Simple, safe and reliable
- > Flexible positioning thanks to radio communication
- > Sensor buffers measurement values to ensure no data is lost in case of temporary interruptions
- > Compatible with elproCLOUD & elproMONITOR

## Technical Specifications ECOLOG-PRO 1NTR

|                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Type</b>                                           | Wireless temperature measurement sensor                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Application area</b>                               | Temperature monitoring for rooms, refrigerators, freezers                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Type of probe</b>                                  | Internal NTC probe                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Measurement range</b>                              | -35 °C..+50 °C (with optional LiFe batteries), -10 °C..+50 °C (with Alkaline batteries)                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Measurement accuracy</b>                           | ±1.0 °C in the range between -35.0 °C and -10.1 °C<br>±0.5 °C in the range between -10.0 °C and -0.1 °C<br>±0.4 °C in the range between 0.0 °C and +25.0 °C<br>±0.8 °C in the range between +25.1 °C and +50.0 °C                                                                                                                                                                                                                                            |
| <b>Measurement resolution</b>                         | 0.1 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Calibration Tolerance</b>                          | For calibration certificate standard tolerances see section 3.1 of the <a href="#">ELPRO Service Description</a>                                                                                                                                                                                                                                                                                                                                             |
| <b>Measurement interval</b>                           | 1, 2, 3, 5, 10, 15, 20, 30, 60 minutes; user programmable via software (elproCLOUD & elproMONITOR)<br>Note: Logging interval will impact battery life                                                                                                                                                                                                                                                                                                        |
| <b>Measurement capacity</b>                           | 14'800 measurement values                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>IP protection class</b>                            | IP67                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Battery life</b>                                   | 14 months<br>(provided that the sensor's radio connection is stable and that the defined temperature range is maintained)                                                                                                                                                                                                                                                                                                                                    |
| <b>Battery type</b>                                   | 2 × Alkaline AAA (for refrigerators or ambient) or 2 × LiFe AAA (for freezer applications)                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Environmental storage temperature / humidity</b>   | -10 °C..+50 °C<br>10 %RH..90 %RH, non-condensing                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Environmental operating temperature / humidity</b> | -35 °C..+50 °C depending on batteries used (see <i>Measurement range</i> )<br>0 %RH..100 %RH                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Operating altitude</b>                             | This device must not be used at altitudes higher than 2000 meters above sea level.                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Display</b>                                        | 3 LED for communication and measurement status                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Certificate</b>                                    | Production validation and 3-point calibration certificate;<br>Additional calibration based on manufacturer calibration standards or ISO 17025 available upon request                                                                                                                                                                                                                                                                                         |
| <b>Traceability</b>                                   | ID number (traceable to component level)                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Report</b>                                         | Via software (elproCLOUD & elproMONITOR)                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Case   Dimension</b>                               | ABS plastic material   Ø 73 mm (2.87 inch), 17 mm (0.67 inch)                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Certifications   Conformity</b>                    | CE (868 MHz)   UKCA (868 MHz)   RoHS   FCC (915 MHz)   ACMA/RCM (915 MHz)   IMDA (868 MHz)                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Wireless connection to communication module</b>    | Available in two versions with 868 MHz or 915 MHz, respectively                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Required communication module</b>                  | ECOLOG-PRO RBR                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Declaration of Conformity</b>                      | <a href="https://www.elpro.com/hubfs/fileadmin/Docs/Quality_Documents/ECOLOG-PRO_1NTR_DOC-Conformity_1000280V01.pdf">https://www.elpro.com/hubfs/fileadmin/Docs/Quality_Documents/ECOLOG-PRO_1NTR_DOC-Conformity_1000280V01.pdf</a><br><a href="https://www.elpro.com/hubfs/fileadmin/Docs/Quality_Documents/20221209_UKCA_DoC_ECOLOG-PRO_Radio.pdf">https://www.elpro.com/hubfs/fileadmin/Docs/Quality_Documents/20221209_UKCA_DoC_ECOLOG-PRO_Radio.pdf</a> |