

RN-30-SG01



RN-30-SG02



Main Features

- ♦ Water level measurement range:
 - RN-30-SG01: 0~76cm (0~2.49ft)
 - RN-30-SG02: 0~156cm (0~5.12ft)
- ♦ EC measurement range: 0~13000 $\mu\text{S}/\text{cm}$
- ♦ Supports RS-485 or SDI-12 protocol
- ♦ IP68 design
- ♦ Foldable mechanism design (RN-30-SG02)

Product Overview

After heavy rainfall, rivers often transport large loads of sediment and dissolved substances, causing significant changes in electrical conductivity (EC). These EC fluctuations, together with concurrent water level shifts, are crucial indicators of river conditions — especially during the early stages of landslides or floods. These variations can provide early warning signals for impending flood events or landslides.

The use of a multi-layer electrical conductivity (EC) profiling smart staff gauge enables near real-time EC profile data collection and transmission at multiple depths in specific locations within a water body. These EC variations, combined with concurrent water-level changes, provide early and reliable indicators of river dynamics.

Specifications

Water level measurement

- ♦ Range:
 - RN-30-SG01: 0~76cm (0~2.49ft)
 - RN-30-SG02: 0~156cm (0~5.12ft)
- ♦ Accuracy: $\pm 1\text{cm}$

EC measurement

- ♦ Range: 0~13000 $\mu\text{S}/\text{cm}$
- ♦ Resolution: 0.1%
- ♦ Accuracy@25°C, $\pm 5\%$ full scale

Temperature sensor

- ♦ Temperature sensor:
 - RN-30-SG01: 3 sensors
 - RN-30-SG02: 6 sensors
- ♦ Range: 0~75°C (32~167°F)
- ♦ Resolution: 1°C

Power Supply

- ♦ DC 9~12V
- ♦ Typical power consumption: 60mW

I/O Interface

- ♦ RS-485 or SDI-12 (customized)
- ♦ DC input 9~12V
- ♦ M12 A-Coded 5-pin female connector

Dimensions

- ♦ RN-30-SG01: 793 (L) x 97 (W) x 30 (H) mm /
31.2 (L) x 3.8 (W) x 1.2 (H) inches
- ♦ RN-30-SG02: 1587 (L) x 97 (W) x 30 (H) mm /
62.5 (L) x 3.8 (W) x 1.2 (H) inches
- ♦ RN-30-SG02 Folded: 793 (L) x 105 (W) x 60 (H) mm /
31.2 (L) x 4.1 (W) x 2.4 (H) inches

Mounting

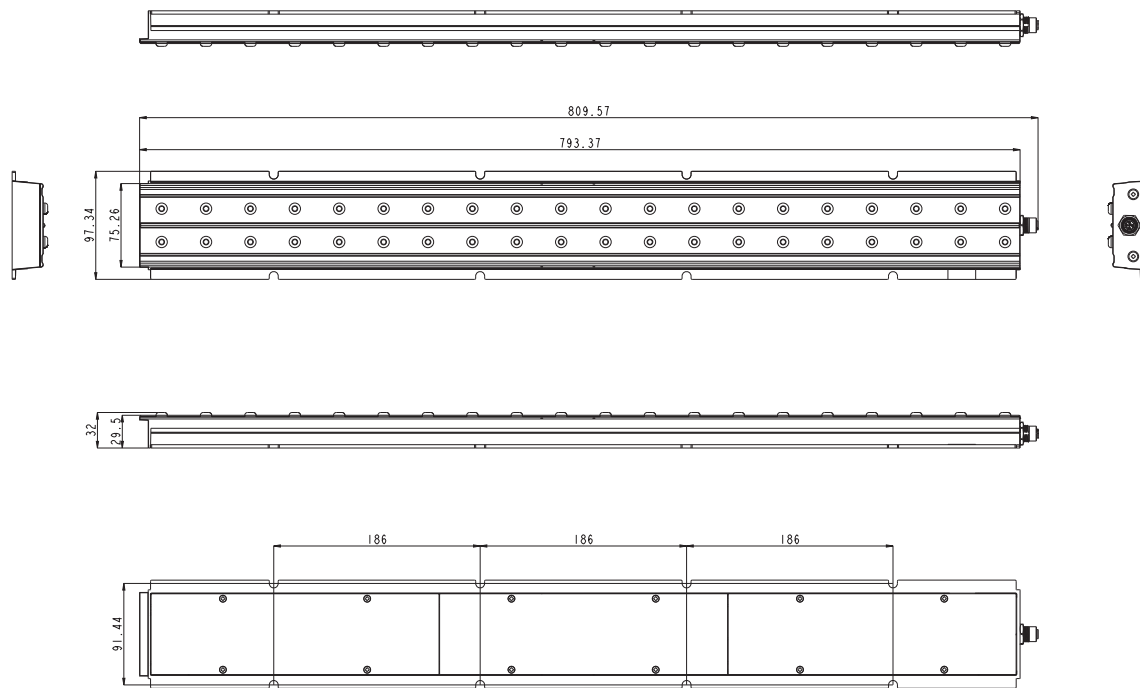
- ♦ Supplied with dedicated mounting brackets

Certifications

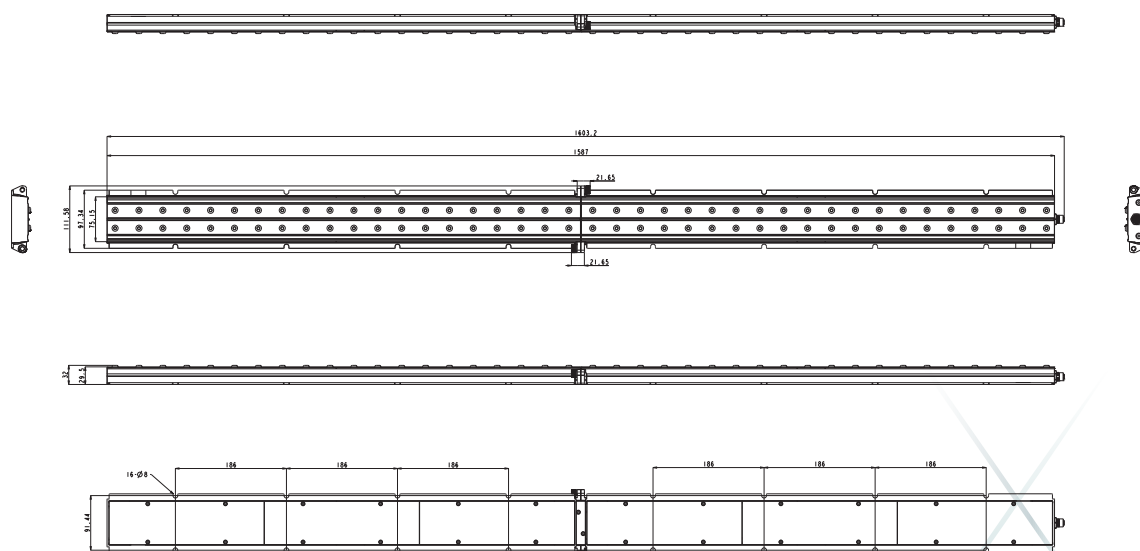
- ♦ CE
- ♦ FCC

Dimension Drawing

RN-30-SG01



RN-30-SG02



Ordering Information

- ♦ **RN-30-SG01 (P/N: 10RA000RN00X0)**
Smart Staff Gauge, 80 CM, RS-485

- ♦ **RN-30-SG02 (P/N: 10RA000RN01X0)**
Smart Staff Gauge, 160 CM, RS-485