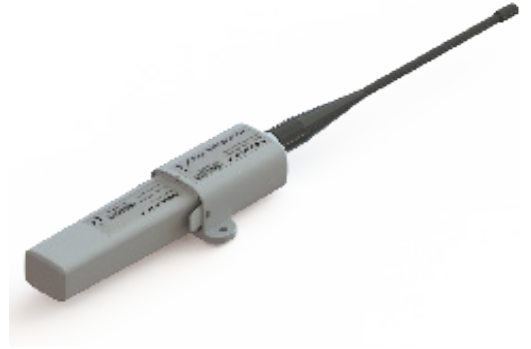# Flex-Sky-T

Flex-Sky-T is a wireless temperature transmitter with an internal Pt100 sensor. Protection class is IP65 so it can be placed e.g. inside freezers or other moist environments.

Flex-Sky-T uses LoRa technology which enables very long-range radio coverage in wireless battery-operated device.

Typically used with Nokeval Cell-Sky-Link-RS485-3G base station but can also be integrated to systems with RS485 Modbus RTU.

General Specifications

Storage temperature	-40...+60 °C
Operation temperature	-30...+60 °C
Operation humidity	0...100 %RH
Protection class	IP65
Enclosure material	Plastic (Measuring module: PC+ABS, Radio module: PC)
Dimensions	363 mm x 33 mm x 61 mm
Weight	Total: 143 g Measurement module: 62 g Radio module with antenna: 81 g
Internal battery type	LR6 1.5 V alkaline AA size battery, e.g. Energizer EN91.
Battery life	Typically, 2-5 years depending on the measurement interval and the radio network traffic amount.

Radio Specifications

Nokeval radio type	Sky-radio
Antenna	Dedicated ¼ wave whip with a BNC connector, Laird EXC420BNX or similar
Center requency	433.3...434.5 MHz user adjustable
Bandwidth	max 300 kHz OBW
Transmitting power	max 10 dBm E.I.R.P.
Open space range	about 10 km with maximal parameters

Sensor Specifications

Sensor type	Internal Pt100 element
Measurement range	-30...+60 °C
Accuracy	±0,5 °C in the range of -30...+50 °C
Step response time	max 40 min to 90% (1 m/s flow)