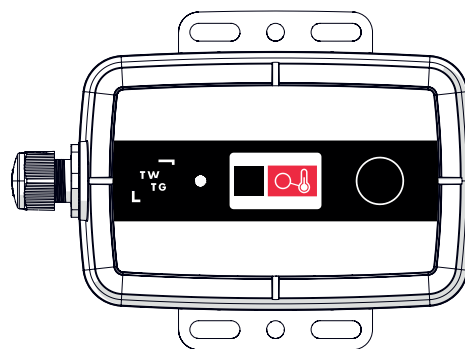


NEON Data Sheet

Temperature Transmitter



Product			
Product name		TW TG NEON Temperature Transmitter	
Type identification		Transmitter: DS-TT-01-XX (See product manual for regional identification)	
Functionality			
Four independent event-based message triggers		1. Above 2. Below 3. Increasing 4. Decreasing	
Adjustable measurement interval		1 - 28800 seconds	
Adjustable message interval		1 - 28800 measurements	
Thermocouples			
Thermocouple types:		Configurable over LoRa, Default Type K	
Sensor Type (<T/Cs>)	Input range (°C)	Accuracy (value whichever is greater)	Temp effects/10 °C (value whichever is greater)
B	400 to 1820	± 0.1 % of span	± 0.05 % of span
E	-100 to 1000	± 0.1 % of span	± 0.05 % of span
J	-100 to 1200	± 0.1 % of span	± 0.05 % of span
K	-180 to 1372	± 0.1 % of span	± 0.05 % of span
N	-180 to 1300	± 0.1 % of span	± 0.05 % of span
R	-50 to 1760	± 0.1 % of span	± 0.05 % of span
S	-50 to 1760	± 0.1 % of span	± 0.05 % of span
T	-200 to 400	± 0.1 % of span	± 0.05 % of span
Units		°C °F can be supported on request	
Open-circuit monitoring		Yes	
Calibration		Factory calibrated	
Cold junction compensation		Integrated digital measurement	

Resistance Temperature Detector (RTD)			
Sensor Type (<T/Cs>)	Input range (°C)	Accuracy (value whichever is greater)	Temp effects/10 °C (value whichever is greater)
Pt100	-200 to +850	± 0.1 % of span	± 0.05 % of span
Units	°C °F can be supported on request		
Interface	Three-wire system		
	Reference current ≤1.0 mA		
Open-circuit monitoring	Yes		
Short-circuit monitoring	Yes		
Battery			
Battery life		>10 Years, at 25 °C Depending on average ambient temperature and network quality	
Conditions (at 25 °C)	Message interval: 1 message / 4 hours		
	Measurement interval: 1 measurement / 5 min		
Battery type (replaceable)		2x Type A	
Voltage		3.6 V	
Capacity		3600 mAh	
Total capacity		7200 mAh	
Environmental conditions			
Operating temperature range		-40°C - 80°C	
Storage temperature range		10°C - 30°C	
Water & dust resistance		IP65	
Mechanical			
Enclosure material		Molded plastic	
Weight Transmitter (including mounting bracket)		260 g	
Dimensions		106 x 64 x 39 mm	
Connector Sensor		M12 Connector 4 Pins, A coded, female	
Installation			
Transmitter		Band clamp or bolts	
Certification			
ATEX/IECEx rating		Ex II 2G Ex ib IIC T4 Gb	



ATEX/IECEx	EN IEC 60079-0 EN 60079-11	IEC 60079-0 IEC 60079-11
ATEX/IECEx certificate	20ATEX0098X (ATEX) DEK 20.0056X (IECEx)	
CE	EN 300 220-1 V3.1.1 EN 300 220-2 V3.2.1 EN 300 330 V2.1.1 EN 301 489-1 V2.2.3 EN 301 489-3 V1.2.1	EN 62311 EN 62368-1 EN 62368-1/A11 EN 60529:1991 + A1:2000 + A2:2013
UKCA	Radio Equipment Regulation 2017	
RoHS	2011/65/EU	
WEEE	2003/108/EC	
Connectivity		
Protocol	LoRaWAN Private LoRa-WAN, public LoRa-WAN upon request	
Frequency band	868 MHz / 923 MHz compatible Region specific frequencies and certifications upon request	
Maximum RF output power	+13 dBm	

