



neroNODE 4-20mA Sensor

Low Current Sensing Device

The neroNODE is a 2-wire, low current 4-20mA sensor, which interfaces with any application that has a 4-20mA output i.e. pH, water-levels, hydraulic pressure, temperature etc. The node is available in two versions, the first version is a stand-alone current monitor and the second version offers the ability to be integrated with existing systems without affecting their readings.

Integration services are offered with this device (NOTE: External power supply is required on the 4-20mA loop).

NODE FEATURES	SYSTEM ADVANTAGES	NODE PARAMETERS
<ul style="list-style-type: none"> 1-2 Year Battery Life Non-Volatile Memory Audible Notification IP67 Enclosure Internal USB Interface LoraWAN or Sigfox capable Motion/Vibration Detection 	<ul style="list-style-type: none"> Onboard Logging Mounting Detector Battery Life Indicator Config Setup Wizard Hosting Included Dashboard Included 2 Year Warranty 	<ul style="list-style-type: none"> Configurable Transmission Interval Configurable Logging Interval Modes: Interval, Threshold, Delta, Hybrid 1000+ Logging Event Buffer Primary Cell Battery Required Reports on Current, Bus Voltage and Power Senses Bus Voltages of 0V – 36V



ENTERPRISE USE



INDUSTRIAL USE



Server Room Temperature Sensor



Hydraulic Pressure Sensors On Machines



Power Management Monitoring



PH Levels in Tankers



Telecommunications Equipment



Machine Temperature Sensors

CERTIFICATION



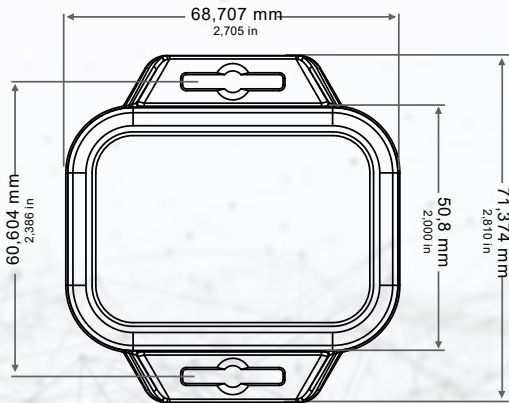
TECHNICAL SPECIFICATIONS

FEATURES

LoRa Radio		Sigfox Radio	
Operating Frequency Bands:			
RC1 - 863-870MHz (EU868)	RC2 - 902-928MHz (US915)	RC4 - 915-928MHz (AU915-928)	
Maximum Tx Gain:			
20dBm (LoRa & Sigfox),			
Minimum Rx Sensitivity: *			
-122dBm Sigfox		-135,5dBm (LoRa)	
3.6V, 2600mAh AA battery			
Operating Temperature Range:			
-40°C~+85°C			
Accuracy:			
±0,5°C (±0,1°C available on request),			

PHYSICAL CHARACTERISTICS:

IP67 Enclosure.		
Height	1.300in, 33.02mm	
Length	2.705in, 68.707mm	
Width	2.000in, 50.80mm	
Weight	Without Battery: 86g	With Battery: 105g



INTERFACE & CONTROL

Description		Spec / Range / Type					
Battery Specifications		1x 2600mAh 3,6V AA battery					
LoRa Radio Frequency	RC1: 868,13 MHz	Class 0					
	RC2: 902.2 MHz	Class 1					
	RC4: 920.8 MHz	Class 1					
Sigfox Radio Frequency	RC1: 868,13 MHz	Class 0					
	RC2: 902,2 MHz	Class 1					
	RC4: 920,8 MHz	Class 1					
Sigfox Receive Sensitivity*		-122 dBm					
Sigfox Transmit Power		4,5 dBm (2,82 mW) To 20 dBm (100 mW)					
LoRa Transmit Power		10 dBm (10 mW) To 20 dBm (100 mW)					
BW\ SF	06	07	08	09	10	11	12
125 kHz	-117,5	-122,5	-125,5	-128,5	-131,0	-133,5	-135,5
250 kHz	-114,0	-119,0	-122,0	-125,0	-127,5	-130,0	-133,0
The Spreading Factor(SF) using LoRa™ modulation *The NeroNODE range has only been Certified for Uplink on Sigfox							

BATTERY OPTIONS:

Manufacturer	Part Number	Voltage	Capacity
EVE	ER14505V	3,6 V	2,6 Ah
TADIRAN	SL-360	3,6 V	2,4 Ah
SAFT	LS14500	3,6 V	2,6 Ah

Device to Dashboard (D2D) with the neroHIVE Software Service

Our D2D solution is one smart package. Simply purchase your neroNODE device, enter your details and start enjoying a connected world.

neroHIVE is available on iOS and Android as a web-based application with optional data storage, push notifications and customisable UI.



REGIONS



9 FREDA ROAD, BROMHOF, JOHANNESBURG, SOUTH AFRICA

sales@nerospec.com

+27 11 791 2320

