

Safety and Specifications

Tank Level Monitor Digital Hall Effect

TM5240DH

Safety warnings

The safety warnings provide information about potential hazards. Make sure you are aware of these warnings.



WARNING

Danger due to misuse!

Only operate the device if it is in an undamaged and orderly condition.

Observe all warning information on the identification labels on the device.

Never deviate from the prescribed maintenance intervals and procedures.

Never modify or attempt to modify the device.

Never allow untrained personnel to operate or service the device. Substitution of components may compromise the intrinsic safety of the device.



WARNING

Risk of serious injury or damage!

Potential electrostatic charging hazard. To clean the communicator, wipe only with a damp cloth. Do not pressure wash.



WARNING

Exercise caution when installing the communicator and its accessories (sensor, articulated float, and so on) near or inside tanks containing flammable substances.



WARNING

Risk of crushed or trapped hands!

You can mount the communicator directly on the tank using its built-in magnetic feet, or with a magnetic mounting bracket. Make sure you are aware of the pinch points between the communicator or bracket and the tank.



WARNING

Risk of serious injury or death!

When installing the tank monitor sensor, you may come into contact with hazardous and flammable substances:

- Use personal protective equipment (PPE) such as protective gloves and safety glasses as required.
- Wear appropriate protective clothing and footwear.
- Do not eat, drink, or smoke when installing the tank sensor.
- Follow local guidelines and safety requirements.



Caution

Always carefully read all warning tags attached to the sensor cable before installing the monitor.

Specifications - TM5240DH

The specifications provide the limits of the monitor.
Make sure you are aware of these specifications.

Table 1 • Device specifications

Specification	Value
Dimensions (H x W x D)	6.3" (16 cm) x 5.1" (13 cm) x 4.3" (11 cm)
Input	Digital Hall Effect Sensor for remote-ready dial
Data interface outputs	API Email to supplier and/or consumer Raw data Online dashboard Client mobile app
Automated testing outputs	Network status Remote sensor cable status Battery status
Reporting	Tank level logs are transmitted to the Nee-Vo Portal every 24 hours (typically), and additional logs are recorded when the in-tank substance level changes by >20% or <5% (typically) Low battery High draw of in-tank substance Excessive draw of in-tank substance Fill detection Ambient temperature where the monitor is installed
Radio technologies	CAT-M1 NB-IoT Dual SIM 2G Bluetooth
Option	GPS (location)

Table 2 • Environmental specifications

Specification	Value
Operating temperature	-40 °F (-40 °C) to 140 °F (60 °C)
Storage temperature	-40 °F (-40 °C) to 140 °F (60 °C)
Relative humidity range	0% to 100%
Enclosure rating	IP20

Table 3 • Certification specifications

Specification	Value
Hazardous location classification	Monitor is third-party QPS Evaluation Services Inc. certified for use in hazardous locations Class I, Div 1, Groups CD, T3 Ex ia IIB T3 Ga Class I, Zone 0, AEx ia IIB T3 Ga
IECEX Classification	Ex ia IIB T3 Ga
ATEX and UKEX Classification	II 1 G Ex ia IIB T3 Ga
FCC Notice	FCC ID: 2ADQFMZ03AD, IC ID : 12649A-MZ03AD
Associated apparatus entity parameters	Uo [V] = 3.9V, Io [mA] = 335mA, Po [mW] = 119mW, Co [μF] = 425uF, Lo [μH] = 10.17uH

Table 4 • Split cable specifications



Information

The total length of all extensions must not exceed 20 ft (6.1 m).
Entity parameter rules must be followed.

Parameter	Parameter value
Entity	$U_o \leq U_i, I_o \leq I_i, P_o \leq P_i, C_o \geq C_i + C_{cable}, L_o \geq L_i + L_{cable}$
Division	$V_{oc} \leq V_{max}, I_s \leq I_{max}, P_{out} \leq P_{max}, C_a \geq C_i + C_{cable}, L_a \geq L_i + L_{cable}$

