




## Type Examination Certificate

for Electrical Equipment used in Potentially Explosive Atmosphere

Issued by Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port CH65 4LZ, UK		
Applicant	Temposonics LLC 3001 Sheldon Dr, Cary NC 27513, United States of American	
Manufacturer name	Temposonics LLC 3001 Sheldon Dr, Cary NC 27513, United States of American	
Product name	Level Transmitter	
Type/model code	Level Plus – see Attachment 1	
Type of protection	Intrinsic Safety	
Group, Temperature Class and EPL	IIC T4 Ga IIC T4 Gb	
The equipment shall be marked with the following	Ex ia T4 Ga Ex ia T4 Gb	
Ratings	See Attachment 2 for details	
Special condition for safe use	See Attachment 3 for details	
Certificate number	<b>CML 18JPN2122X</b>	
Term of validity	From 12-04-2018 to 11-04-2021	
	From 12-04-2021 to 11-04-2024	
	From 12-04-2024 to 11-04-2027	

This is to certify that the equipment specified above complies with the requirements stipulated in Ordinance on Examination of Machines and Other Equipment of the Ministry of Health, Labour and Welfare, Japan.

Issue date: 12-04-2024

Signature of chief examiner:



**Attachment 1 – Model codes**

Level Plus Digital Level transmitters

Level Plus Analog Level Transmitters. (Tank Slayer, RefineME, SoClean, Chambered)

**Attachment 2 - Rating**Level Plus Digital Level Transmitters

**Supply:**  $U_i = 28\text{ V}$ ,  $I_i = 100\text{ mA}$ ,  $C_i = 0\text{ }\mu\text{F}$ ,  $L_i = 0\text{ mH}$ ,  $P_i = 700\text{ mW}$

**Rx/Tx-:**  $U_i = 8.6\text{ V}$ ,  $I_i = 10\text{ mA}$ ,  $C_i = 0\text{ }\mu\text{F}$ ,  $L_i = 0\text{ mH}$ ,  $P_i = 21.5\text{ mW}$

**Rx/Tx+:**  $U_i = 8.6\text{ V}$ ,  $I_i = 10\text{ mA}$ ,  $C_i = 0\text{ }\mu\text{F}$ ,  $L_i = 0\text{ mH}$ ,  $P_i = 21.5\text{ mW}$

Level Plus Analog Level Transmitters

**Loop 1:**  $U_i = 28\text{ V}$ ,  $I_i = 120\text{ mA}$ ,  $C_i = 0\text{ }\mu\text{F}$ ,  $L_i = 5\text{ }\mu\text{H}$ ,  $P_i = 840\text{ mW}$

**Loop 2:**  $U_i = 28\text{ V}$ ,  $I_i = 120\text{ mA}$ ,  $C_i = 0\text{ }\mu\text{F}$ ,  $L_i = 5\text{ }\mu\text{H}$ ,  $P_i = 840\text{ mW}$

**Attachment 3 – Special conditions for safe use**

- i. The apparatus enclosure contains aluminum and is considered to constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction. (When installed in a Ga Approval)
- ii. The maximum permitted ambient temperature of the Level Plus Digital/Analog Level Transmitter is  $71\text{ }^{\circ}\text{C}$ . To avoid the effects of process temperature and other thermal effects care shall be taken to ensure the surrounding ambient and the ambient inside the transmitter housing does not exceed  $71^{\circ}$
- iii. Some models contain non-metallic enclosure parts, to prevent the risk of electrostatic sparking the non-metallic surface should only be cleaned with a damp cloth.