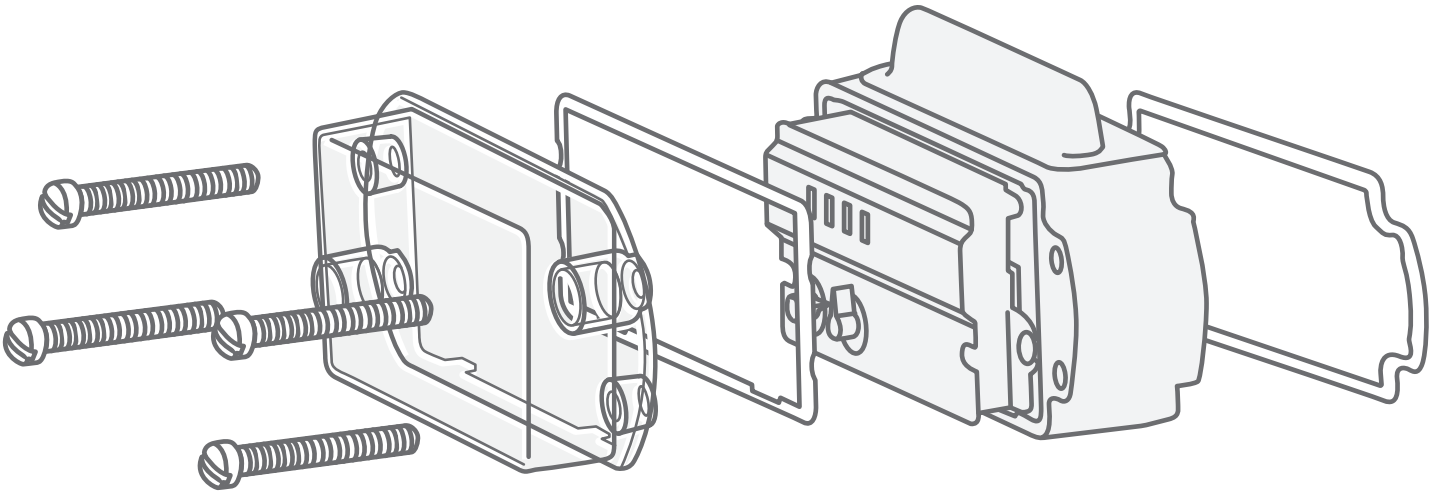
Safety Requirements and Specifications

Volumetric Meter
Smart Volumetric Adapter for Diaphragm Gas Meter

Models: VM3010, VM3020
Manufacturer: Otodata Wireless Network Inc.



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Safety requirements

Prior to installation and use, it is essential to read and understand this instruction manual; paying particular attention to the Ex marking,[1] special conditions of use, and technical parameters.

1. NEVER carry out any service manipulations in the presence of an explosive atmosphere.
2. The Volumetric Meter (VM3010 or VM3020) is delivered with connected batteries.
3. Start-up of the device requires only proper use of user interface.
4. Activities related to starting up of the device do not have influence on Ex safety.
5. This device was not designed to be maintained or repaired. This device was not design to be adjusted.
6. During installation or deinstallation, it is imperative to protect the device from building an electrostatic charge on its surface.
7. The device is designed for fixed mounting.

WARNING

In order to guarantee a safe, explosion-proof environment and ensure conformity to the Certifications (page 1), the below requirements must be fulfilled without fail:

1. Ambient temperature range is -40ºC ≤ Tamb ≤ +60ºC.
2. The device shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge (under certain extreme circumstances, the plastic enclosure may store an ignition-capable level of electrostatic charge).
3. DO NOT RUB. The equipment shall only be cleaned with a damp cloth.
4. Do not damage the exposed casting compound surface. Ensure the compound is fully covered and not exposed after equipment installation.

1 Explosive Atmosphere rating

INSTALLATION

Always follow your local regulations and standards. If locally required, consult a certified expert to ensure your installation is compliant. Install per the CEC for installation in Canada and per the NEC for installations in US.

Special conditions of use

In order to guarantee explosion proof safety and conformity with legal acts listed in Clause 0, listed below requirements shall be absolutely fulfilled:

1. Ambient temperature range is -40ºC ≤ Tamb ≤ +60ºC,
2. Under certain extreme circumstance, the plastic enclosure may store an ignition-capable level of electrostatic charge. The device shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge. Do not rub. The equipment shall only be cleaned with a damp cloth.
3. DO NOT RUB. The equipment shall only be cleaned with a damp cloth.
4. DO NOT puncture exposed compound surface, place caution not to damage the exposed compound surface prior to installation.
5. INSTALLATION Always follow your local regulations and standards. If locally required, consult a certified expert to ensure your installation is compliant.

Specifications

Input

Hall effect detection of turns on gas meter's axle

Reporting & Outputs

Reporting	Gas consumption in cubic feet Low battery Temperature
Data Interface	API Email (to supplier and/or consumer) Raw data Online dashboard Client mobile app
Automated Testing	Network status Battery status

Radio Specifications

Technologies	VM3010: Bluetooth BLE VM3020: Bluetooth BLE, LTE-M, NB-IoT

Environmental Specifications

Operating and storage temperature range	-40 °C to 60 °C -40 °F to 140 °F
Relative humidity range	0% to 100%
Enclosure rating	IP68
Warranty	5 years

Features

Ready to install, long lasting battery, hardware installation included.

Certifications

Hazardous Location Classification
Otodata's volumetric gas meters are certified by QPS Evaluation Services Inc. for use in North America.

United States
Class I, Div 1, Groups CD, T3. Class I, Zone 0, AEx ia IIB T3 Ga. Standards applied: UL 60079-0:2019; Ed., UL 60079-11:2013; UL/CSA 61010-1-12.

Canada
Class I, Div 1, Groups CD, Ex ia IIB T3 Ga. Standards applied: CSA C22.2 NO. 60079-0:19, CSA-C22.2 NO. 60079-11:14, UL/CSA 61010-1-12.

Volumetric gas meters are certified by Ośrodek Badań Atestacji i Certyfikacji OBAC for use in the European Union and internationally.

IECEx
Classification: Ex ia IIB T3 Ga, Certificate: IECEx OBAC 23.0007X, Standards applied: IEC 60079-0:2017 – IEC 60079-11:2011

ATEX
Classification: II 1G Ex ia IIB T3 Ga, Certificate: OBAC ATEX 0311X, Standards applied: EN 60079-0:2017 – EN 60079-11:2011

Radio Certifications
FCC ID: 2ADQFVM30X0, IC ID: 12649A-VM30X0

Adapter Dimensions

Height: 13.9 cm (5.5 in), Width: 8.4 cm (3.3 in), Depth: 3.6 cm (1.4 in)

Ordering Options

VM3020-VSXX-CBLK[1]
Smart Volumetric Adapter for gas meter with Bluetooth interface and cellular network modem.

VM3010-V0XX-CBLK[1]
Smart Volumetric Adapter for gas meter with Bluetooth interface.

1 Replace "XX" with the appropriate regional code. If available, replace "CBLK" with client branding code.