Gas Konnect

TKN2801 / TKN2803

Pulse Reader (Meter AMR)
Relay Switch (Solenoid Control)
Controller (Meter AMR + Solenoid Control)

M-Bus LoRaWAN®

FEATURES

- Pulse Reader (Gas Meter Reader - AMR)
- Relay Switch (Control 230V AC powered Gas Solenoid valves)
- Network Protocols : Wired M-Bus, LoRaWAN
- Automatically read Gas Flow and volume data
- Valve Sizes – DN8 to DN300
- Complaint with all gateways
- Standard enclosure / ATEX enclosure
- Standard Enclosure – Industrial Grade (IP67)
- ATEX Enclosure- suitable for Zone 2 & 22 operation
- Real time valve status and Gas meter AMR monitoring
- Valve control (ON / OFF commands via Telegrams)
- Optional digital input for tamper signals
- Extensive cloud base / ON Premise application (UBILL VCM / IBM)
- Inbuilt EEPROM Memory
- Stores Volume & Operation Count with date and time
- 1500 Hourly / 150 Daily / 15 Monthly Readings with date and time
- LED indications for Communication, Low battery, Open/close status

CE   RoHS

M-Bus   LoRaWAN®

Compatible with

ubill — UTILITY METERING SOLUTION & SERVICE

IBM — INTEGRATED BILLING MODULE

SERIES	TKN2801	TKN2803
PROTOCOL	Wired M-Bus M-Bus	Wireless LoRaWAN LoRaWAN®

Gas Solenoid valves and Gas meters are not supplied along with **Gas Konnect** controller

INTRODUCTION

The GAS KONNECT TKN280X series is an innovative solution for integrating smart technology into domestic gas distribution networks. By converting existing gas solenoids into Network operated smart solenoids, it enables remote operation, which can enhance efficiency and control over gas distribution systems. This integration with billing application software like UBILL IBM / UBILL VCM suggests that it not only provides operational benefits but also facilitates billing and monitoring processes, making it a comprehensive solution for gas distribution management.

With GAS KONNECT devices acting as Slave nodes, they can connect to any standard Network master / gateway in the market, facilitating interoperability. This setup enables greater remote control and monitoring of gas distribution systems, enhancing efficiency and potentially improving safety measures.

Pulse Reader - GAS KONNECT TKN2801P / TKN2803P

Gas Konnect TKN2801P / TKN2803P is a set of pulse to network enabled gas metering AMR device, which convert the pulse output from gas meter to respective network protocol message telegram details.

TKN2801P   M-Bus enabled Gas Konnect Pulse Reader

TKN2803P   LoRaWAN enabled Gas Konnect Pulse Reader

Specifications

Model	Gas Konnect TKN2801P	Gas Konnect TKN2803P
Communication	Wired M-Bus (EN 13757 Standard) M-Bus	Wireless LoRaWAN LoRaWAN
Enclosure	PC-GFS (Polycarbonate) Weatherproof resistant	IP 66
Type	Built In Pulse reading (Gas meter reading and storage) (Suitable for all Gas meters with pulse output)	
Features	Automatically read Gas Flow and volume data Integrated battery with life expectancy of 10+ years Operating temperature ranges -5 ° C to +60ºC Real time clock with historical data logging options Data storing options incase of power failure/ Battery failure 2 Digital inputs configurable (Pulse Read / standard DI)	
Memory & Data Storage	Inbuilt EEPROM Memory Stores Volume & Operation Count with date and time 1500 Hourly / 150 Daily / 15 Monthly Readings with date and time Last 15 Error/Tamper events with date and time	
Software Support	Meter readings and history read through UBill IBM / UBill AMR Software	
Tamper Alarm	Tamper proof (Gaskonnect module cover open) Tamper proof (Pulse sensor)	
LED Indications	Communication (RX/TX) (Red and green toggle flash every 2 secs) Low Battery Indication (Red LED flash 500ms ON & 500ms OFF) Memory full or Any other alarms (Green LED flash 500ms ON & 500ms OFF)	
Terminal Block (Push - in Type)	4-pin for M-bus connection(in/out) 4-pin for meter pulse & tamper input	4-pin for meter pulse & tamper input

Relay Switch - GAS KONNECT TKN2801R / TKN2803R

GAS KONNECT TKN2801R / TKN2803R is a set of smart relay devices designed to integrate with GAS SOLENOIDs in Domestic gas distribution networks. These devices essentially convert existing gas solenoids into network operated smart solenoids.

TKN2801R   M-Bus enabled Gas Konnect Relay Switch
TKN2803R   LoRaWAN enabled Gas Konnect Relay Switch

Specifications

Model	Gas Konnect TKN2801R	Gas Konnect TKN2803R
Communication	Wired M-Bus (EN 13757 Standard)	Wireless LoRaWAN
Enclosure	PC-GFS (Polycarbonate) Weatherproof resistant	
Type	Solenoid valve control Module (Gas solenoid valve open/close) (Suitable for all Gas solenoid valves)	
Features	Operating temperature ranges -5 ° C to +60ºC Real time clock with tamper logging options 1 Relay output with NO/NC	
Memory & Data Storage	Inbuilt EEPROM Memory Stores Operation Count with date and time Last 15 Error/Tamper events with date and time	
Software Support	Controls Solenoid valve through UBill IBM / UBill AMR Software	
Output Relay	Relay contact rating up to 250 V AC, 5 A (For operating Gas solenoid valves)	
Tamper Alarm	Tamper proof (Gaskonnect module cover open)	
LED Indications	Communication (RX/TX) (Red and green toggle flash every 2 secs) Open (Green LED every 5 secs single Flash for 500 ms) Close (Red LED every 5 secs single Flash 500 ms)	
Local Operation	Inbuilt Open/Close switch for manual operations (Configurable)	
Terminal Block Power (Push - in Type)	2-pin for 230V AC power input 4-pin for Solenoid Valve Power output	
Terminal Block Communication (Push - in Type)	4-pin for M-bus connection(in/out)	

Controller - GAS KONNECT TKN2801C / TKN2803C

Pulse Reader + Relay Switch

GAS KONNECT TKN2801C / TKN2803C is another variation of the smart relay devices, specifically designed to integrate with both gas solenoids and pulse-enabled gas meters in domestic gas distribution networks.
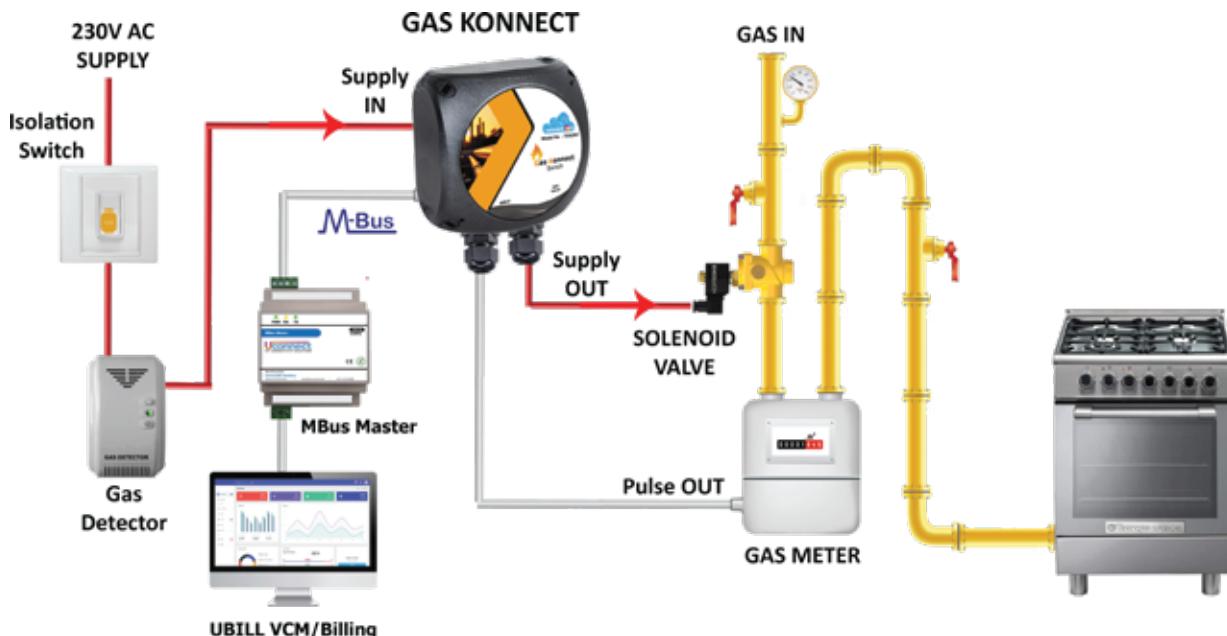
TKN2801C   M-Bus enabled Gas Konnect Controller

TKN2803C   LoRaWAN enabled Gas Konnect Controller
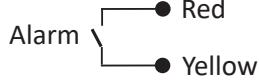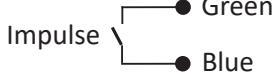
Model	Gas Konnect TKN2801C	Gas Konnect TKN2803C
Communication	Wired M-Bus (EN 13757 Standard) M-Bus	Wireless LoRaWAN LoRaWAN
Enclosure	PC-GFS (Polycarbonate) Weatherproof resistant	IP 66
Type	Built In Pulse reading (Gas meter reading and storage) Valve control Module (Gas solenoid valve open/close) (Suitable for all compatible Gas meter with pulse output and Gas solenoid valves)	
Features	Automatically read Gas Flow and volume data Integrated battery with life expectancy of 10+ years Operating temperature ranges -5 ° C to +60ºC Real time clock with historical data logging options Data storing options incase of power failure/ Battery failure 2 Digital inputs configurable (Pulse Read / standard DI) 1 Relay output with NO/NC	
Memory & Data Storage	Inbuilt EEPROM Memory Stores Volume & Operation Count with date and time 1500 Hourly / 150 Daily / 15 Monthly Readings with date and time Last 15 Error/Tamper events with date and time	
Software Support	Meter readings and history read through UBill IBM / UBill AMR Software Controls Solenoid valve through UBill IBM / UBill AMR Software	
Tamper Alarm	Tamper proof (Gaskonnect module cover open) Tamper proof (Pulse sensor)	
Output Relay	Relay contact rating up to 250 V AC, 5 A (For operating Gas solenoid valves)	
LED Indications	Communication (RX/TX) (Red and green toggle flash every 2 secs) Open (Green LED every 5 secs single Flash for 500 ms) Close (Red LED every 5 secs single Flash 500 ms) Low Battery Indication (Red LED flash 500ms ON & 500ms OFF) Memory full or Any other alarms (Green LED flash 500ms ON & 500ms OFF)	
Local Operation	Inbuilt Open/Close switch for manual operations (Configurable)	
Terminal Block (Push - in Type)	4-pin for M-bus connection(in/out), 2-pin for 230V AC power input 4-pin for Solenoid Valve Power output, 4-pin for meter pulse input	

Remote Shut off valve - Connections

Data concentrators & Accessories

Model	Description
U2601G-S0250	M-Bus Master gateway panel for 250 devices
U2601G-S0500	M-Bus Master gateway panel for 500 devices
U2601G-S0750	M-Bus Master gateway panel for 750 devices
U2601G-S1000	M-Bus Master gateway panel for 1000 devices
U2603G	LoRaWAN Master gateway panel
TKN2851	Gas Konnect Pulse generator (Compatible with Honeywell / Elster Gas meters Alarm — Red / Yellow Impulse — Green / Blue

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