



Techknave

# CLAMP ON BTU METER & FLOW METER



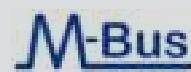
## FEATURES

- Measurement accuracy +0.5 to 1%
- Non-Invasive with no pipe disturbance and no Maintenance
- Easy installations
- Wide range, pipe size from DN25mm to DN6000mm and flow rate of 0.01 to 15m/s
- Suitable for many common pipe materials
- Communication interface – Modbus RTU / TCP, BACNET MSTP /IP and MBus
- 4G / GPRS modem for remote monitoring
- Connectivity to UBILL MACCLOUD server for Record & Analyze
- Weather resistance enclosure – IP65
- BTU, Mwh, Velocity, Volumetric, Totalized flow measurements
- Internal data logging



- |                    |                    |
|--------------------|--------------------|
| » HIGH PERFORMANCE | » RELIABLE         |
| » COMPACT          | » CLOUD CONNECTED  |
| » ROBUST           | » INDUSTRIAL GRADE |

## COMMUNICATION INTERFACE



## INTRODUCTION

Techknave TKN 202 series Wall-mount Clamp on Ultrasonic BTU/ FLOW meter provides accurate thermal energy and Liquid flow measurements from outside of a pipe. TKN 202 series can be virtually applied to a wide range of pipe sizes and in long-term online measurement. A variety of liquid applications can be accommodated: ultra-pure liquids, portable water, chemicals, raw sewage, reclaimed water, cooling water, river water, plant effluent etc. Due to the non-intrusive nature of the clamp-on technology, there is no pressure drop, no leaks, no risk of contamination, no corrosion, no moving parts and easier and faster installations.

Pipe size starting from DN25 to DN6000 with most type of pipe materials (All metals, Most plastics, Fiber glass and more). Techknave TKN 202 offers MODBUS TCP, BACNET MSTP/IP and MBus communication interface. GPRS /4G module available for remote monitoring and remote control through UBILL cloud Server platform.

## MEASURING DIAGRAM

Flow Measurement	Energy/BTU	Features
<b>CLAMP-ON</b> 		<ul style="list-style-type: none"> <li>» No need to cut off water, no pressure loss.</li> <li>» Additional clamp on temperature transducer, perform the heat/energy measurement.</li> <li>» Easy for Installation.</li> </ul>

## FLOW TRANSDUCERS

External clamp on flow transducers supplied in two variants.

Flow Transducer type	Picture	Model
Flow Transducer for pipe size less than 2" (<DN50)		F1
Flow Transducer for pipe size greater than 2" (>DN50)		F2

## TEMPERATURE TRANSDUCERS

Supply & Return pipe temperature transducer supplied in 2 variants with clamp on type.

■ Temperature range: -30 – 160 °C      ■ Accuracy: 100°C ± 0.80°C

Temperature Transducer type	Picture	Model
Small size Pt100 transducer for pipe size less than 2" (<DN50)		T1
Large size Pt100 transducer for pipe size greater than 2" (>DN50)		T2

## APPLICATIONS:

Techknave T202 series wall mounted CLAMP ON BTU and FLOW METER are ideal for process-control / BTU or kWh energy measurement / Flow measurement, Flow verification, Energy Audits, Network leak detection and various other industry requirements.

- » Flow meter verifications
- » Energy Audits
- » Network Metering
- » Food, Beverage & Pharmaceutical plants
- » Petrochemical industry

## CLOUD SERVER CONNECTED

TKN 202B GSM model helps to connect Flowmeters to UBILL MACCLOUD server making SMART IOT solution. The subscription-based service helps the meter to automatically monitor real time values, log, analyze and notify all critical parameters of the CLAMP ON BTU / FLOW meters. The platform helps the Energy consultants, Utility companies, ESCO managers to evaluate timely insights of Flow & Energy consumption.

## COMMUNICATION INTERFACE

- Rich intuitive dashboard
- Real time monitoring
- Energy auditing
- GEO Location mapping
- Measurement and verification
- Energy & cost saving tracking.
- Regression analysis
- Bill creation and Verification
- KPI analysis and portfolio benchmarking



## ORDER CODE

TKN 202		X	X	XXX
B	Clamp on BTU meter (Thermal Energy Meter)			
F	Clamp On Flow meter			
S	Pipe size less than 2" (< DN 50)			
M	Pipe Size greater than 2" (> DN50)			
000	MODBUS RTU serial (Rs485) as standard			
MBT	Modbus TCP			
BNT	Bacnet IP			
BNM	Bacnet MSTP			
GSM	GSM / GPRS built in modem			



### CLAMP ON BTU METER & FLOW METER



### Sales Enquiry:



ConnectME Solutions,  
Dubai Silicon Oasis, Dubai - UAE



(+971) 56 2250600, (+971) 4 234 8480



sales@connectme.biz



[www.techknave.com](http://www.techknave.com)

