

PM453 Battery-powered wireless pressure transmitter

MAIN FEATURES

- Wireless output eliminates the need for complex wiring and installation.
- Compact and easy to install; can be readily mounted on handheld fire extinguishing units for monitoring.
- Ultra-low power design with a standby current as low as 10μA.
- Remote parameter configuration; adjustable sampling intervals, communication intervals, and standby durations.
- Powered by a high-capacity, long-life battery; accessible battery design allows for easy replacement.
- Features a high-performance diffused silicon sensor paired with an advanced, highly integrated signal conditioning chip designed for bridge-type pressure sensors.
- Offers high sensitivity, high precision, and high stability.
- Includes digital temperature compensation and non-linearity correction, ensuring excellent electrical performance and long-term stability.



OVERVIEW

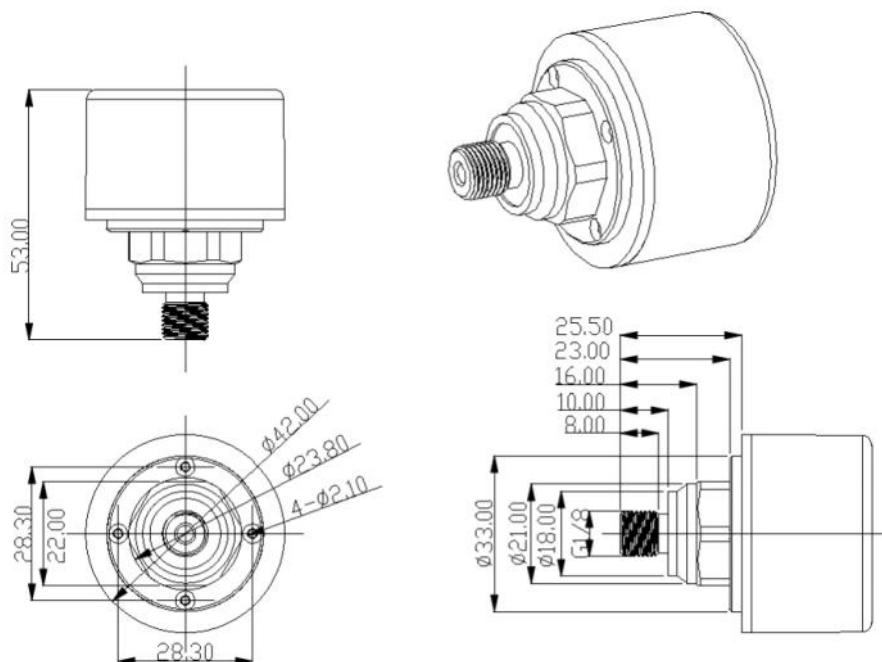
PM453 wireless pressure transmitter is a high-efficiency, cost-effective LoRa communication product launched by our company for the IoT industry. Combining flexibility, high stability, broad compatibility, strong interoperability, a compact form factor, and affordability, it meets the requirements of most industrial applications and is suitable for a wide range of vertical sectors, including smart communities, smart fire safety, smart homes and buildings, smart metering, smart agriculture, and smart logistics.

SPECIFICATION

Measurement range	0-25 bar
Overload pressure	200% FS
Combined accuracy	±0.5%, ±1%
Temperature compensation range	-10 to 70°C
Long-term stability	±0.3% FS/year
Operating temperature	-40 to 85°C
Storage temperature	-40 to 125°C
Power supply	3 VDC battery
Current	As low as 10 μA
Communication method	LoRa
Communication protocol	LoRaWAN
Wireless frequency band	470-510 MHz
Communication frequency	Adjustable (e.g., once per day)
Sampling frequency	Adjustable (e.g., once every 60 seconds)
Ingress protection rating	IP65
Media compatibility	Various fluids non-corrosive to 304 stainless steel
Vibration	10 g RMS (20-2000 Hz)
Shock	100 g, 11 ms
Insulation	>100 MΩ @ 250 VDC
Response time	<1 ms (@ 90% FS)
CE certification	EMC: IEC 61326-1 Class B; Electrostatic Discharge (ESD) Immunity: IEC 61000-4-2 Electromagnetic Field Immunity: IEC 61000-4-3; EFT Immunity: IEC 61000-4-4 Surge Immunity: IEC 61000-4-5

DIMENSION

Unit:mm



ORDER CODE

Code:	A	–	B	–	C	–	D	–	E	–	F	–	G
Model:	PM453	–	G	–	0-50bar	–	S	–	L	–	G 1/2	–	4G

Model	Code A
Wireless pressure transmitter	453
Pressure type	Code B
Pressure	-
Differential pressure	D
Pressure & temperature	C
Pressure Range(X=specific range)	Code C
0-25Bar	X Bar
Other customized	C
Accuracy	Code D
0.25%(typical)	T
0.5%(standard)	S
Interface material	Code E
316L	L
304	S3
Other customized	C

Process connection	Code F
G1/2	G1/2
M20*1.5	M20
G1/4	G1/4
G1/8	G1/8
1/2NPT	1/2NPT
1/2PT	1/2PT
1/4NPT	1/4NPT
1/4PT	1/4PT
More customized	C
Output signal	Code G
Lora	LR
Lorawan	LRW
More customized	C