

PM452 Battery-powered wireless pressure transmitter

MAIN FEATURES

- Wireless output; eliminates the need for complex wiring and installation
- Ultra-low power design; standby current as low as 10 μ A (30 μ A with LCD display)
- Customizable sampling intervals, communication intervals, and standby durations (ranging from 60 seconds to 24 hours)
- Powered by a high-capacity 40,000mAh battery with a lifespan of 3–5 years; accessible battery design allows for easy replacement
- Data storage function ensures no data loss during network outages
- Remote configuration of device parameters
- Built-in Bluetooth 5.0 for easy functional expansion
- Magnetic switch design allows for routine operations without opening the housing cover
- High-performance diffused silicon sensor paired with an advanced, highly integrated signal conditioning chip designed for bridge-type pressure sensors
- High sensitivity, high precision, and high stability
- Full-temperature range compensation; excellent electrical performance and long-term stability



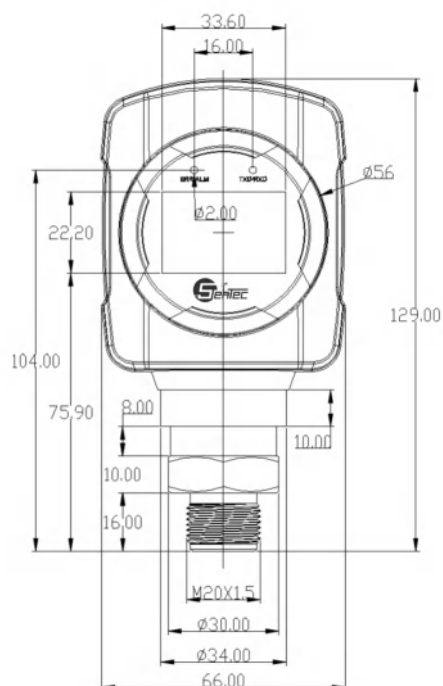
OVERVIEW

PM452 is a battery-powered wireless pressure transmitter featuring an ultra-low power design and support for multiple communication protocols; it is easy to install and use. It is widely applicable to automated pressure measurement and monitoring network systems for water, oil, gas, and other media.

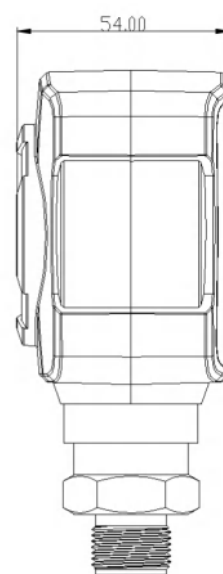
SPECIFICATION

Measurement range	0–60 MPa
Overload pressure	200% FS (≤ 10 MPa); 150% FS (≥ 25 MPa)
Process connection	M20 $\times$ 1.5, etc. (customizable)
Combined accuracy	$\pm 0.5\%$, $\pm 0.2\%$, $\pm 0.1\%$, $\pm 0.075\%$ (selectable)
Temperature compensation range	-10 to 70 $^{\circ}$ C
Long-term stability	$\pm 0.3\%$ FS/year
Operating temperature	-40 to 85 $^{\circ}$ C
Storage temperature	-40 to 125 $^{\circ}$ C
Supply voltage	3.6 VDC lithium battery, 40,000 mAh
Communication method	NB-IoT/LoRa/ZigBee/4G / Bluetooth
Communication protocol	CoAP/MQTT/LoRaWAN/CLAA/IEEE802.15.4/Bluetooth 5.0
Communication interval	60 seconds (customizable)
Ingress protection	IP67
Media compatibility	Various fluids non-corrosive to 304 stainless steel
Vibration	10 g RMS (20–2000 Hz)
Shock	100 g, 11 ms
Insulation	>100 M Ω @ 250 VDC
Response time	<1 ms (@ 90% FS)
CE certification	EMC: IEC61326-1 Class B Electrostatic discharge immunity: IEC61000-4-2, Electromagnetic field immunity: IEC61000-4-3, EFT immunity: IEC61000-4-4, Surge immunity: IEC61000-4-5

DIMENSION



Unit:mm

**ORDER CODE**

Code:	A	–	B	–	C	–	D	–	E	–	F	–	G
Model:	PM452	–	G	–	0-50bar	–	S	–	L	–	G 1/2	–	4G

Model	Code A
Wireless pressure transmitter	452
Pressure type	Code B
Pressure	-
Differential pressure	D
Pressure & temperature	C
Pressure Range(X=specific range)	Code C
0-60 MPa	X MPa
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
NB-IOT	NB
Lora	LR
4G	4G
Lorawan	LRW
ZigBee	ZB
More customized	C