

GPT244

INTRODUCTION

GPT244 differential pressure transmitter adopts the technology of monocrystalline silicon sensor, is suitable to measure flow, level, density and pressure of the measured liquids, gases and steam. It is a kind of differential pressure measurement instruments with the function of radio data transmission and the characteristics of battery-powered. Wireless transmission methods are SWSN (Our own efficient protocol transmission method) and Lora (Spread spectrum wireless transmission method), which has the characteristics of ultra-low power consumption and ultra-strong signal penetration respectively.



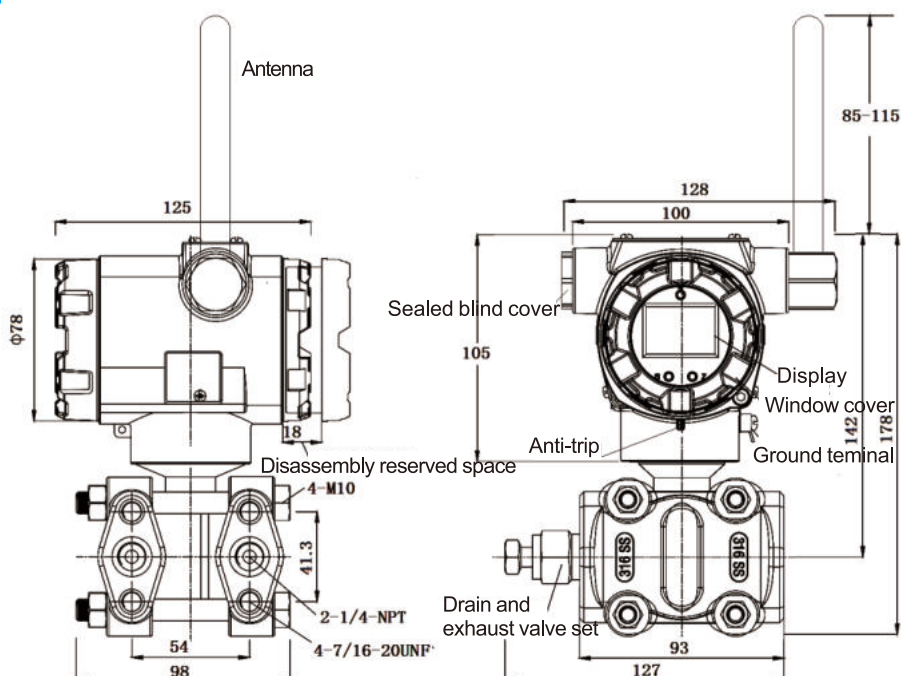
FEATURES

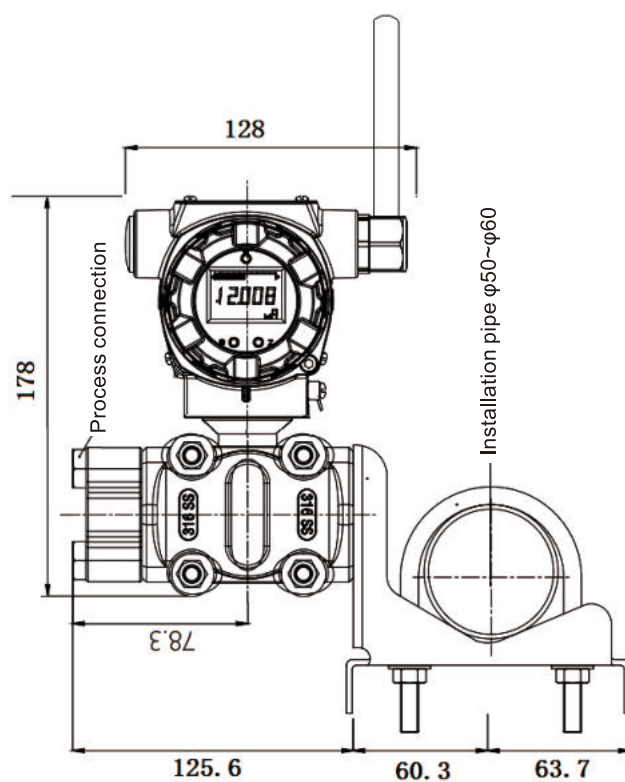
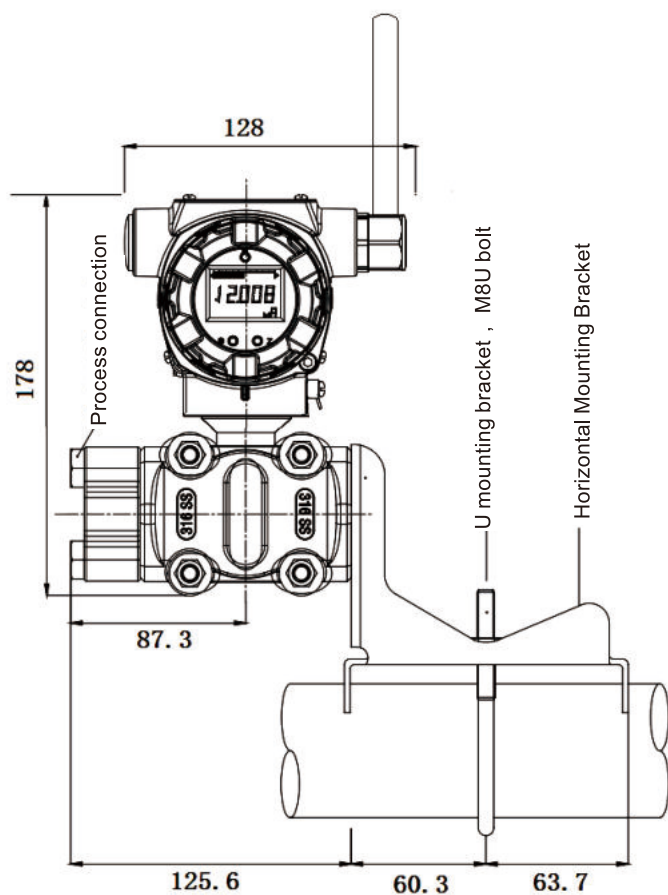
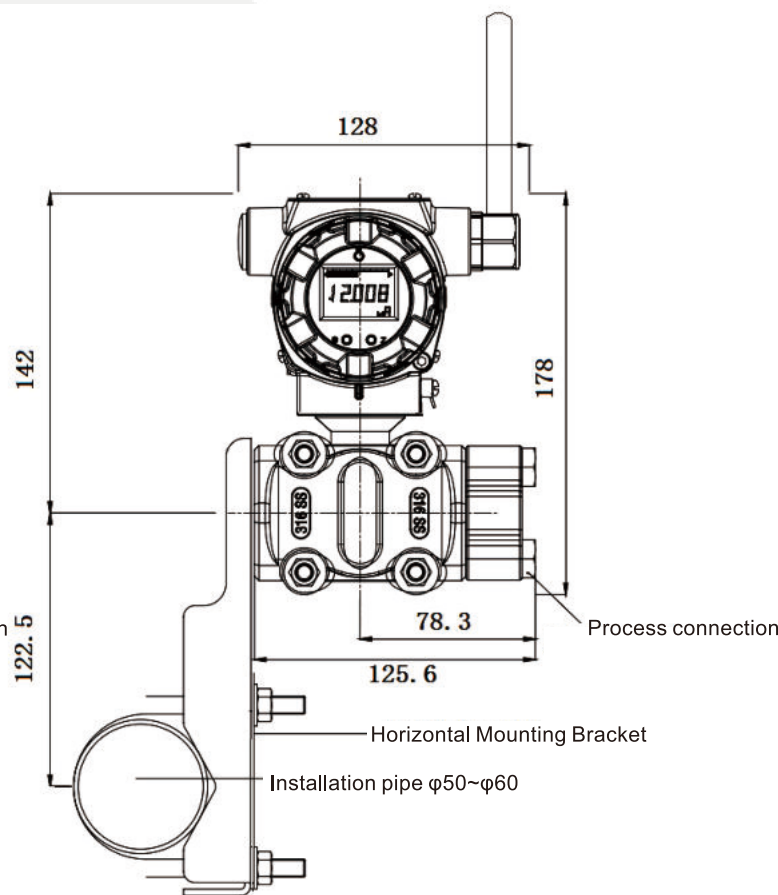
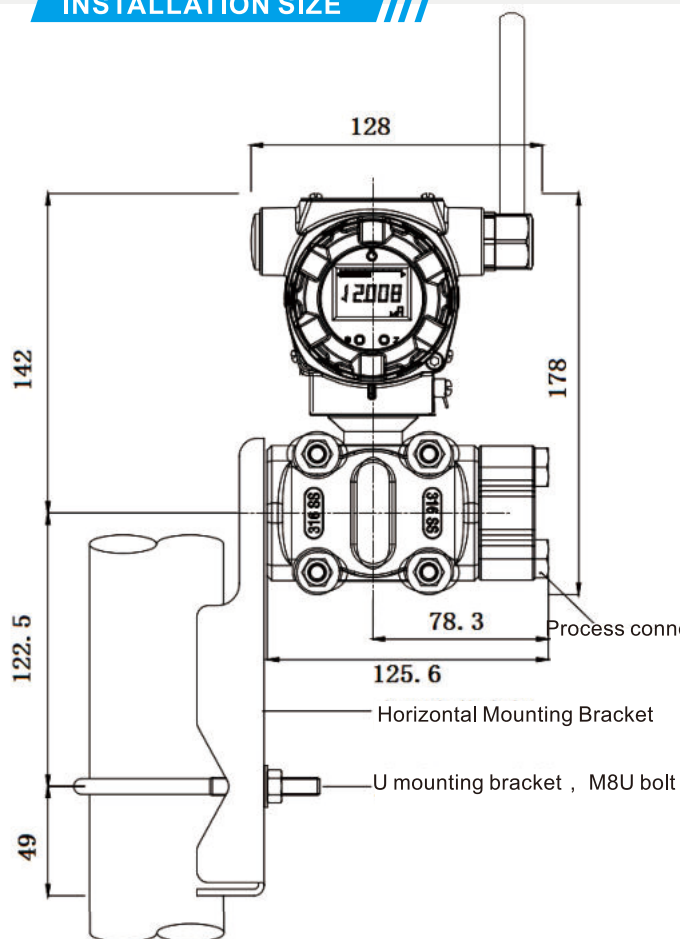
- Built-in high precision monocrystalline silicon pressure sensor, high measurement range
- Ultra-high overvoltage performance
- Local three-button setting
- Standard testing range reference accuracy: $\pm 0.075\%FS$
- Ultra-low power consumption , 1s sending interval, 3 years battery life. (SWSN)
5s sending interval, 8 years battery life. (SWSN)
- LORA spread spectrum wireless transmission distance up to 5 kilometers (Sight Distance)
- 5 digits LCD ultra-low power segment code display
- Timing send+Changes send function
- Dual frequency redundant communication function (optional)

APPLICATION

- Wind pressure and flow velocity measurement in industrial processes
- Measuring systems such as dry gases
- Pipe and furnace pressure measurement
- Petrochemical industry

Pressure range	-500kpa~0~10Mpa						
Resolution	0.01						
Reference accuracy	±0.075%FS						
Wireless transmission	GFSK SWSN ; LORA ;						
Data upload interval	1-255s(GFSK) ; 1-255min(LORA) ;						
Data upload mode	Timed upload ; Changes upload(Changes limit can be set)						
Equipment working environment	-40~85℃; humidity 0~95%RH, no condensation						
Environment temperature influence	Total impact/28℃(50 ℉) ± [0.08% range +0.015% upper range limits]						
Static influence	±0.1% range/10MPa						
Stability	±0.1% upper range limits/5 Yrs						
Power effect	±0.005%/1V						
Protection grade	IP66						
Fixed method	Fastening with U-bolts on 50mm (2-inch) pipes						
Weight	3.0~3.2kg						
Battery parameters	Capacity 19000mAh, voltage 3.6V						
Sending interval	0.25s	1s	2s	5s	1min	2min	10min
Battery life	0.8Yr	3Yrs	5Yrs	10Yrs	1Yr	3Yrs	8Yrs
Wireless transmission	SWSN	SWSN	SWSN	SWSN	LORA	LORA	LORA
Testing condition : 20℃ 60%RH Lab Battery Self-Discharge Rate : <1%/Yr							
Radio parameters							
Wireless mode	SWSN			LORA			
Transmission distance(sight distance)	1000~2000m			5000~10000m			
Transmission distance(Obstacles, reference)	50-250m			250-1000m			
Carrier Frequency	430~470~510M 860~930M(customized)			430~470~510M 860~930M(customized)			

DIMENSION




GPT244	Differential pressure transmitter																
	Code		Output signal														
	GF	SWSN GFSK wireless(Sight distance1000m)															
	LR	LORA wireless(Sight distance 5000m)															
		Code		Pressure range													
		F	-6~6KPa (Static pressure 16MPa)														
		L	-10~10KPa (Static pressure 16MPa)														
		M	-100~100KPa (Static pressure 16MPa)														
		H	-500~500KPa (Static pressure 16MPa)														
		VL	0~4MPa (Static pressure 25MPa)customized														
		VM	0~10MPa (Static pressure 25MPa)customized														
			Code	Wetted material		Process interface		Isolation membrane box		Isolation gasket		Drain/Gas plug					
			S			316		316L		PTFE		316					
				Code	Process interface												
				3	Process connector with 1/4NPT F												
			4	Process connector with 1/2NPT F													
					Code	Bolts and nuts material											
					J	Carbon steel with plastic sprayed, carbon steel galvanized											
				B	304 stainless steel												
				G1	316L stainless steel												
						Code	Installation										
						8	Horizontal installation, high pressure at right side										
						9	Horizontal installation, high pressure at left side										
							Code	Amplifier Housing									
							1	Cast aluminum alloy									
								Code	Electrical interface								
								7	1/2NPT F Two electrical interfaces with one blind plug (wired type)								
							9	M20*1.5 F Two electrical interfaces with one blind plug (wired type)									
				0			M20*1.5 F an electrical interface with plug (No wire plug)										
								Code	Built-in display								
	D							Digital display									
	N						None										
								Code	2-inch Pipe Mounting Brackets								
		A			Carbon steel with plastic sprayed, flat bracket												
		B	304 stainless steel, flat bracket														
		C	Carbon steel with plastic sprayed, L type bracket														
	D	304 stainless steel, L type bracket															
	J	316 stainless steel, flat bracket															
	K	304 stainless steel, L type bracket															
GPT244	D	M	S	4	J	8	1	9	D	B							