

HM100PR Density Monitors

- Suitable for indoor or outdoor installation.
- Up to 4(four) sets of switch contacts toachieve over-pressure alarm, dual alarm or double locking and many other solutions, ensuring the monitoring more secure and reliable.

Application

- SF₆ Gas Insulated Switchgear (GIS)
- SF₆ Insulated Circuit Breakers
- SF₆ Insulated Pole-Mounted Switch
- SF₆ Insulated Transformers
- SF₆ Insulated Current Transformers or Voltage Transformers
- SF₆ Insulated Busbar Systems

Description

HM100PR Density Monitors are used to monitor SF₆ gas density in sealed tanks. They are applied to provide alarm signal outputs when the density reaches preset values. Furthermore, it can transmit the real-time SF₆ gas density data remotely, to achieve online remote monitoring function.. They are specifically designed for over 500kV EHV grade application field, adapting multi-level protection and full range of shielding measures to ensure the reliable operation of the products.

Features

- They adopt highly reliable protection circuit design, multi-level isolation and filtering technology, thus effectively inhibiting the intrusion of conductive interference.
- They adopt the full-body shield design, stainless steel shielding shell, shielding junction box and shielding window glass, thus ensuring the ability of anti-electromagnetic radiation interference.
- They are able to adopt the optic fiber communication backstage, thus avoiding data transmission losses from electromagnetic interference.
- The use of high-precision SF₆ density algorithm ensures that the background monitoring data coincides with those field instructions.
- They are compatible with ordinary SF₆ remote products. They do not need other modifications in strong interference occasions.
- The temperature compensation device ensures higher measurement accuracy.

Technical Parameters for	or Remote Module				
Power supply	24V DC	Anti-electromagnetic interference	IEC61000-4-2 IEC61000-4-3 IEC61000-4-4 IEC61000-4-5 IEC61000-4-6 IEC61000-4-8 IEC61000-4-9 IEC61000-4-10 IEC61000-4-12 IEC61000-4-17 IEC61000-4-29	level 4/A level 4/A level 4/A level 3/A level 3/A level 5/A level 5/A level 5/A level 3/A level 3/A 0.1s/A	(8KV/15kV) (30V/m) (4KV) (+/-2Kv) (10V) (100A/m) (100A/m) (100A/m) (4KV) (10%U _N) (40%U _T /70%U _T)
Power consumption	< 2W				
Communication mode	RS485				
Protocol	ModBus RTU				
Baud rate	9600bps				

Technical Parameters

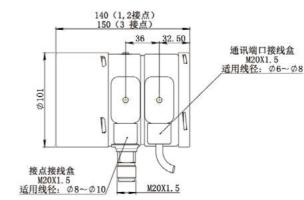
- Case diameter
- Scale range
- Accuracy
- Degree of protection
- Ambient conditions
- Leakage rate
- **Process Connection**
- Installation method
- Electrical connection
- Contact insulation performance
- Contact type
- Impact rating
- Contact electrical parameters
- Watch glass
- Weight
- Pressure element

Options

■ Oil-filled.

■ Wide temperature range : Optional-40°C~ +60°C or -60° C \sim +60° C.

Dimensions



100mm

-0.1 \sim 0.9MPa (customizable)

 $\pm 1.0\%$ FS (+20 $\pm 1^{\circ}$ C), $\pm 1.8\%$ FS (-20°C \sim +60°C) (gas phase)

IP65

-20° C \sim +60° C, relative humidity \leq 95% RH

 $\leq 1 \times 10^{-9}$ Pa·m³/s (Helium leakage inspection)

M20 \times 1.5, (customizable)

Radial or Axial

Plug-in connection M20 \times 1.5 sealing head cable size: 1.5mm² recommended, upper limit 2.5mm²

Insulation resistance: >100MΩ (DC 500V) Withstand voltage: 2kV, 50/60Hz, 1min

Magnetic snap-action switch 80%Ag, 20%Ni, 10µm Gold plated

50g (oil-filled), 30g (non-oil-filled)

30W/50VA, 1A (upper limit) 220VDC/380V 50/60Hz (upper limit)

Laminated safety glass

 \approx 1.2kg

Bourdon tube

Measuring medium: SF_6 , Air, N_2 , $SF_6 + N_2$ and other gases. ■ Optional measurement accuracy: ±1.6%FS (+20±1°C), $\pm 2.4\%$ FS (-20°C~ +60°C) (gas phase).



