

Visibility Meter

»Product Introduction

The HY-VTF306 series consists of transmissive meteorological visibility meters used to measure atmospheric visibility distance.

The HY-VTF306AE model features a stainless steel housing and is suitable for high-salt-fog, humid environments such as ships, drilling platforms, and coastal areas; its derivative model, the HY-VTF306ADE, is an explosion-proof version suitable for high-risk environments where flammable gases are present (comes with an explosion-proof certification).

The HY-VTF306BE features a cast aluminum housing that is both sturdy and lightweight. It can be installed along highways or used portably on high-speed moving vehicles.

The HY-VTF306 series can be equipped with a weather phenomenon detection module that identifies precipitation and snowfall types and distinguishes between weather phenomena such as drizzle, light rain, moderate rain, and heavy rain; optional modules are also available to measure the intensity and cumulative amount of precipitation and snowfall.

This series features a robust design, stable operation, high reliability, low power consumption, and ease of use and maintenance. It is powered by a 12–30 V DC power supply; the optical lenses are equipped with an automatic heating control module, enabling them to operate normally in extreme environments such as severe cold.

The lens features an anti-webbing design that prevents spiders and other insects from spinning webs in the optical detection area, which could affect data accuracy, thereby enabling maintenance-free operation.

»Technical Indicators

Measurement Range	10 m–10 km (Can be expanded to 80 km)
Measurement Accuracy	±5% (10 m–2 km), ±10% (2 km–10 km)
Weather Phenomena Module (Optional A)	Four types of precipitation: drizzle, light rain, moderate rain, heavy rain; various weather conditions: rain, snow, light fog, dense fog
Measurement of Weather Phenomena (Optional B)	Measurement of rainfall and snowfall intensity based on Option A: Measurement range 0–200 mm/h
Resolution	0.1 mm (Rainfall), 1 mm (Snowfall)
Baud Rate	4800–19200
Digital Output	RS485/RS232
Analog Output Interface (Optional)	Channel 1: Voltage output 0–5/10 V; current output 4–20 mA
Protocols	ModBus-RTU, ModBus-ASCII
Operating Temperature/Humidity	-40 °C ~ 80 °C / 0—100%RH
Material/Weight	Aluminum alloy / ≤3.8 kg; Stainless steel / ≤2.5 kg
Size (306AE/BE/ADE)	646 × 328 × 176 mm / 696 × 280 × 170 mm / 713 × 388 × 217 mm
Power Input	VDC 12–24
Power Consumption	4 W

»Applications

- Highways
- Ships and Drilling Platforms
- Waterways and Ports
- Wind Power Generation
- Automatic Weather Stations



»Key Features



- Robust design, stable operation, high reliability, low power consumption, easy to use and maintain
- Automatic heating control module for optical lenses enables normal operation in extreme environments such as severe cold
- Anti-webbing lens design prevents spiders and other insects from affecting data accuracy; maintenance-free operation
- 306AE: stainless steel housing for high-salt-fog, humid environments such as ships, drilling platforms, and coastal areas
- 306ADE: explosion-proof version certified for high-risk environments where flammable gases are present
- 306BE: cast aluminum housing, sturdy and lightweight; fixed installation or portable use on high-speed moving vehicles
- Optional weather phenomenon detection module identifies precipitation and snowfall types

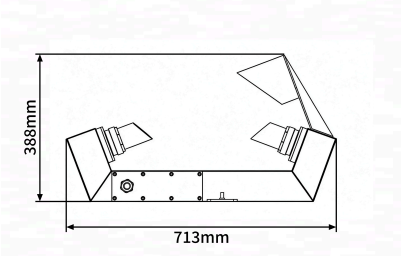
»Product Showcase



HY-VTF306AE



HY-VTF306BE



HY-VTF306ADE