# SEM9000 Micro automatic meteorological station / urban ambient air station

### **MAIN FEATURES**

lenlec

- Solid and durable overall design, easy to install, all-weather measurement
- No moving parts, maintenance free for the whole system
- Modbus communication protocol, standard RS485 / RS232 / SDI-12 output
- Electronic compass, GPS or Beidou global positioning module can be added
- Internal heating device ensures normal operation in severe cold climate
- Integrated automatic weather station with PM2.5 and PM10 dust particle concentration detection



# **OVERVIEW**

SEM9000 micro automatic meteorological station is a civil integrated meteorological station independently developed by our company, which can measure multiple meteorological parameters. It can simultaneously measure atmospheric temperature, atmospheric humidity, wind speed, wind direction, air pressure, rainfall, radiation, illuminance, UV radiation, PM2.5 and PM10 and other meteorological elements.

SEM9000 uses low-power chip, and the power consumption is only 1.7w. Due to the adoption of new technology and new process, the structure is more compact and compact. Mini visibility detection module can also be selected, which is very suitable for smart city control system. The shell is ABS engineering plastic, and according to the user's requirements, all the test parameters can be selected and combined at will, completely customized.

# **SPECIFICATION**

ITEMS	Range	Accuracy	Resolution
Wind speed	0-40m /s	± 5%	0.1
Wind direction	0-359 °	±3 °	1 °
Temperature	- 40 °C - + 80 °C	± 0.5°C	0.1 °C
Humidity	0-100%	±5%	1
Atmospheric pressure	150 — 1100hPa	±1	0.1hPa
Rainfall*	0-200mm/hr	±5%	0.01mm
Altitude*	-500m ~ 9000m	±5%	1m
Radiation*	0-2000 W/m2	±5%	0.1 W/m2
Illuminance*	0-200000lux	±5%	0.1 lux
UV radiation*	0-2000 W/m2	±5%	0.1 W/m2
PM1.0/PM2.5/PM10(dust)*	0-500µg/m3	±10%	1µg/m3
Digital output	RS232, RS485, SDI-12		
Power supply	VDC: 7V-30V (Heating Version start 12VDC)		
IP protection	IP65		
Baut rate	4800 - 19200		
Communication	ModBus, NMEA-0183, ASCII		
Size	Ф84mm× (120-298) mm / 0.38kg		
Material	Black/White/ASA		

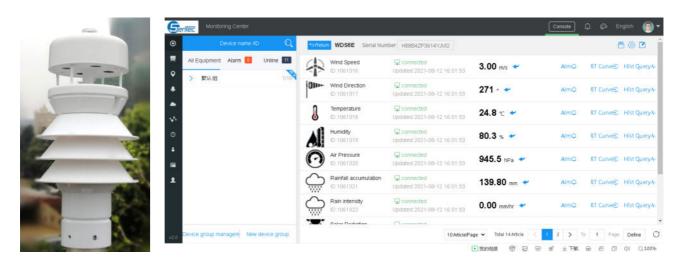
E-mail: info@cdsentec.com www.cdsentec.com

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Unit:mm



#### **APPLICATION**



## **ORDER CODE**

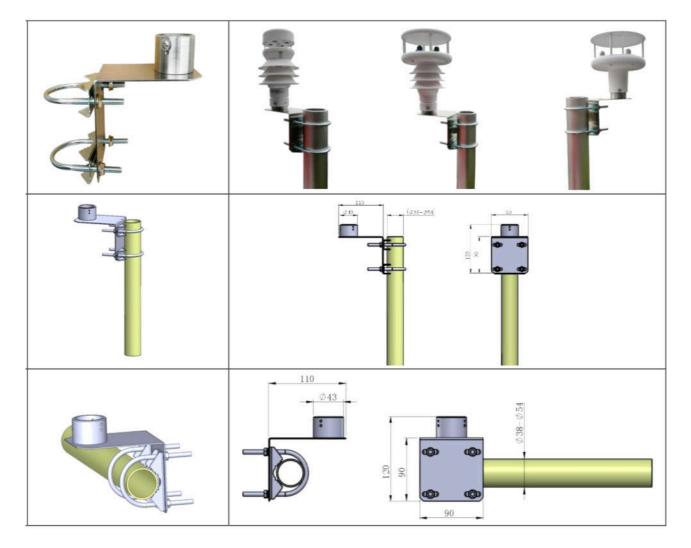
Name	Micro automatic meteorological station / urban ambient air station		
	CODE	Function type	
	<ul> <li>A Wind speed + wind direction+temperature +humidity + atmospheric pressure</li> <li>B Wind speed + wind direction+temperature +humidity + atmospheric pressure +r</li> </ul>		
	С	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+altitude	
SEM9000	D Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+altitude+radiation		
	Е	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+altitude+radiation+illumination	
	F	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+altitude+radiation+illumination+UV radiation	
	G	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+altitude+radiation+illumination+UV radiation+PM2.5, PM10	

Note: the above parameters can be selected and combined according to the user's requirements. Please specify the specific parameters and quantity when ordering.

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# L type installation



## I type installation



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