WIND MONITORING / DATA SHEET

SS105-03

Wireless Wind Speed and Direction Monitoring System

Remote wind speed and direction measurement with LoRa point-to-point transmission.

Overview

- SS105-03 is a wireless system for monitoring both wind speed and wind direction.
- The source-listed measurement ranges are 0-50 m/s for wind speed and 0-360° for wind direction.
- LoRa point-to-point transmission supports a listed transmission distance of up to 2 km.
- The system uses DC 12-30 V power and provides Modbus-RTU point-to-point output.



Wind speed **0-50 m/s**	**Wind direction** **0-360°**	**Power** **DC 12-30 V**	**Wireless** **LoRa P2P**
Distance **≤2 km**	**Protocol** **Modbus-RTU**	**Wind strength** **>70 m/s**	**System** **Speed + direction**

Key Advantages

- Simultaneous wind speed and wind direction monitoring.
- LoRa point-to-point wireless transmission.
- Listed transmission distance up to 2 km.
- Modbus-RTU point-to-point data output.
- Wide wind speed range with full 0-360° direction coverage.

Application Scenarios

- Remote wind speed and direction monitoring points.
- Meteorological and environmental observation.
- Industrial sites requiring wireless wind data transfer.
- Wind farms, ports and large-equipment areas.
- Outdoor monitoring locations where cabling is difficult.

Measurement Principle

The system measures wind speed and wind direction, then transmits the monitoring data through a LoRa point-to-point wireless link. The source-listed transfer protocol is Modbus-RTU, and the listed transmission distance is up to 2 km.

Technical Specifications

Item	Specification
Power supply	DC 12-30 V
Wind speed measurement range	0-50 m/s
Wind direction measurement range	0-360°
Wind strength	>70 m/s

Item	Specification
Wireless transmission	LoRa; point-to-point
Transmission distance	≤2 km; LoRa point-to-point
Transfer protocol	Modbus-RTU; LoRa point-to-point output

The specifications above reproduce the values identified in the supplied product information. Confirm the final wireless configuration before ordering.

Output and Communication

Interface	Source-listed configuration
Wireless transmission	LoRa; point-to-point
Transmission distance	≤2 km; LoRa point-to-point
Transfer protocol	Modbus-RTU; LoRa point-to-point output
Measurement channels	Wind speed and wind direction

The wireless link and transfer protocol are listed for point-to-point system output. Final node and receiver configuration should follow the confirmed order specification.

System Data Flow

Stage	Source-listed function
Measurement node	Wind speed and wind direction
Wireless link	LoRa point-to-point; transmission distance ≤2 km
Data output	Modbus-RTU; LoRa point-to-point output

Product Selection

Selection	Configuration
Base model	SS105-03 - Wireless Wind Speed and Direction Monitoring System
Power supply	DC 12-30 V
Wireless transmission	LoRa; point-to-point; distance ≤2 km
Transfer protocol	Modbus-RTU; LoRa point-to-point output
Measurement	Wind speed: 0-50 m/s; wind direction: 0-360°

Specify SS105-03 together with the confirmed wireless node, receiver and communication configuration.

CONTACT / SUPPORT

SpeSense Technologies Inc.
Add: No. 9 Yuhe Road, Guitang Subdistrict, Yuhua District, Changsha City
Tel: +86-15386478166
Email: info@spesense.com
Web: www.spesense.com

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