



FA21 Wind Combined Sensor

Why Choose AIT-FA21

Superior Protection

Built-in circuitry safeguards against radio frequency interference, electromagnetic interference, and lightning surges.

Optimal Cold Weather Operation

Features automatic heating in freezing conditions thanks to its sensitive temperature sensor.

Robust and Durable Construction

Utilizes a secure maze connection for the wind cup and housing, high-grade bearings, a corrosion-resistant stainless steel wind cup, and a durable aluminum alloy housing with polyester coating.

Excellent Environmental Resistance

The internal PCB is protected against water, salt fog, and sand-dust through conformal coating and glue sealing.

Flexible Integration

Offers various signal output options for different systems.

KEY FEATURES

- Non-Contact Measurement
- High Accuracy and Reliability
- Wide Measurement Range & Low Threshold
- Robust Construction
- Durable Wind Cups
- Compact and Integrated
- Wiring Protection
- Surge Protection
- Wide Voltage Compatibility
- Flexible Output Options

AIT- FA21



Product advantages

- **Multiple signal output methods**
- **Cleverly constructed**
- **User-friendly installation**
- **Requires no maintenance**

Guangdong Zeyang Intelligent Technology Co.,Ltd

**④ 7F01, Chuangyan Headquarters,
Zone B, Haobang Shou Smart Park,
Sanshui District, Foshan City,
Guangdong Province**

① +86 17340557898

⑤ sales@zeyang-ai.com

⑥ www.zeyang-ai.com

AIT- FA21 Wind Combined Sensor Datasheet

Conforms to Certification	IEC61326
Electrical Parameters	
Operating Voltage	12VDC~30VDC
Operating Current	100mA Max
Heating Voltage	18VDC~30VDC
Heating Power	≤100W
Heating Principle	PTC Auto-heating
Principle of Measurement	Non-contact Magnetic Encoder Scanning
Entry cable	Aviation connector
Cable Slip Line Configuration	6-core Shielded Wire With Aviation Plug: 6*0.5mm ² +1*0.5mm ²
Mechanical	
Colour	Cationic Oxidized Black
Main Material	6061/Anodizing
Anemometer Cup Material	5052/Anodizing
Weathervane Material	Carbon Fibre +SS304
Bearing Material	Corrosion-resistant SS440C
Parameter Weight	1.1kg
Operating Temperature	-40°C~+70°C
Operating Humidity	IEC60068-2-3 0~100%RH
Vibration Resistance Level	5-10Hz,d=3mm 10-500Hz,a=2g
Ingress Protection (IP) rating	IEC60529, IP65
Smoke Level	ISO9227 720h
Meteorological	
Starting Threshold	≤0.5m/s Vu=20 C
Anti-wind Level	>70m/s
Range of Wind Direction Measurement	0°~360°
Wind Direction Measurement Accuracy	±2°
Wind Direction Resolution	0.35°
Wind Speed Measurement Range	0 m/s ~50 m/s
Wind Speed Resolution	0.1 m/s
Wind Speed Measurement Accuracy	±0.5m/s or ±3%V MAX