



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

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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*0.5mm²+1*0.5mm²

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℃~+70℃

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