



CRAWLER & MOBILE CRANES WIND SPEED MONITORING

The WINDCRANE Mini Jib end is designed specifically for crawler cranes and mobile cranes. It is a compact and tough wind monitoring system which is easy to install.

WINDCRANE is extremely energy efficient using negligible amounts of power, it connects directly to the 24V power supply at the end of the jib/boom.

WINDCRANE gives you LIVE and HISTORICAL wind data specific to your site and crane.

Your information is saved to a cloud platform which you can access 24/7, worldwide from the WINDCRANE mobile app or dashboard.



WINDCRANE Cloud Data Service & Software

Wind speed measurement

Average & max wind data with turbulence intensity

24/7 Cloud Storage

Daily and weekly back-up, archiving and recovery services

Mobile Network Communications

10 minute data transfer to cloud portal using global multi-network roaming SIM
Worldwide Mobile Network connectivity

Data sampling

1Hz to IEC61400 & BSI EN 13000

Hosting services

Fully managed enterprise class servers, ISO27001 Tier 3 Data Centres

Wind Data

Fleet management dashboard and mobile app
Detailed site specific live and historical wind speed reports

Wind Speed Alerts

Unlimited mobile phone wind speed alert notifications

Technical support

Email, phone and WhatsApp

Technical Specifications

WINDCRANE Mini Jib End

Enclosure/Mechanical

Compact weatherproof case (IP67 rated) with loops for mounting straps or lanyards
M12 connector pigtail for sensor

Dimensions and weight:

220 x 130 x 65 mm (LxWxH incl cable glands)
0.75 kg approx (Jib-end 24V logger)

Mounting

2no heavy-duty straps through enclosure loops
(110W x 115H mm centres)

Operating Temperature:

30°C to +60°C

Power

3m 2-core connection cable with wire ends for direct connection to crane's 12-24 VDC accessory power
9-28 VDC operating range, 5 mA average consumption at 24 VDC

Sensor Options

1x wind speed anemometer (pulse/switch or low-voltage sine wave sensors)
Connects via pre-wired M12 connector pigtail
Internal temperature, humidity and barometric pressure and supply voltage sensors

Data Connectivity

Built-in cellular connectivity with internal antenna and worldwide coverage
Data automatically transmitted to WINDCRANE web portal and app



WINDCRANE S20 Wind Speed Sensor

Dimensions and weight

Sensor height 130 mm, rotor diameter 190 mm
Mount tube + sensor height 300 mm approx
0.6 kg incl. fixings and cable

Materials

Lexan/polycarbonate rotor and ABS body, PVC weather boot, black colour
Low-friction self-lubricating bearings

Mounting

Integral mounting tube, 250 mm length, 12.7 mm dia.
2no galvanised U-bolts and saddles to suit tubular pole of 25-40 mm diameter.

Working Temperature

-40 °C to +60 °C (non-icing)

Sensor

Tacho generator with rotating magnet

Measurement range

0.75 - 50 m/s (3-180 km/h, 2-112 mph)
(survival 90 m/s, 320 km/h, 200 mph)

Accuracy

1% nominal, ± 0.1 m/s (5-25 m/s) or 1 km/h (3-15 km/h), consensus standard
(MEASNET calibrated version also available)

Power & Connection

Passive sensor, no power required
M12 4-pole male connector on pre-wired 1.5 m pigtail
Logger connection via M12 cable supplied separately

Output signal

Signal Sine wave, 0.2-12 V peak-peak, 0-125 Hz
Frequency linearly proportional to wind speed
Speed m/s = 0.76 x Hz nominal
(conversion from frequency signal to wind speed units is handled by WINDCRANE system)

