INTRINSICALLY SAFE WIRELESS ANEMOMETER

Digitron

WS-E10 (Explosion-proof Wind speed meter)

WSD-E11 (Explosion proof wind speed/direction meter)

WS-E10

WSD-E11

ATEX/IECEx intrinsically safe approved

First of its kind in the world

Wireless technology real time update

Ultra transmission distance

Long sensor battery life

Integration via industrial output

Digitron Long Range Wireless Explosion Proof Anemometer Series provide two reliable solutions for hazardous area, WS-E10(Explosion-proof Wind speed meter) and WSD-E11(Explosion proof wind speed/direction meter). Both adopt state-of-art wireless technology and obtain ATEX/IEC certifica-tion. Scarlet WS-E10/WSD-E11 with high-end design and intrinsically safe feature, make it the ultimate solution to improve worksite safety.

Unlike the existing explosion proof anemometers in the market, WS-E10/WSD-E11 stands out for its wireless technology. Operators can monitor the wind condition in safe distance without cable connection. Integration with your own safety system is also feasible via 4-20mA industrial output. Bluetooth connectivity allows users to monitor wind condition in real time on their smart-phones by using Digitron free App. With all these unique features, Digitron aims to improve operation safety in all kinds of harsh environment.
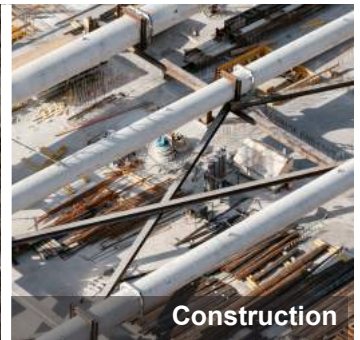
Application Areas

Offshore/onshore platfrom

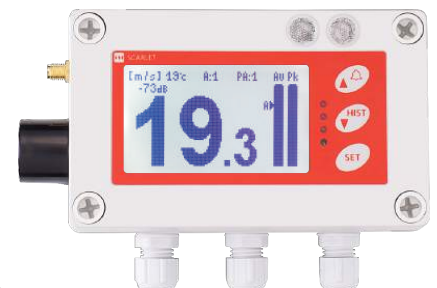**Oil/gas industry**

Mining industry

Construction

Features

· Certified as EX 2G ex ib II . Monitor wind condition in hazardous area

· IP67 Water-proof. Withstands harsh environments.

· Smartphone connectivity via bluetooth and free iOS/Android App

· Long Wireless transmission range. Up to 1300 m (3000m with external antenna)

· 4 years sensor battery life.

· Integrated alarm & pre-alarm warning lights

· Build in audible alarm

· 3 programmable alarm relay outputs

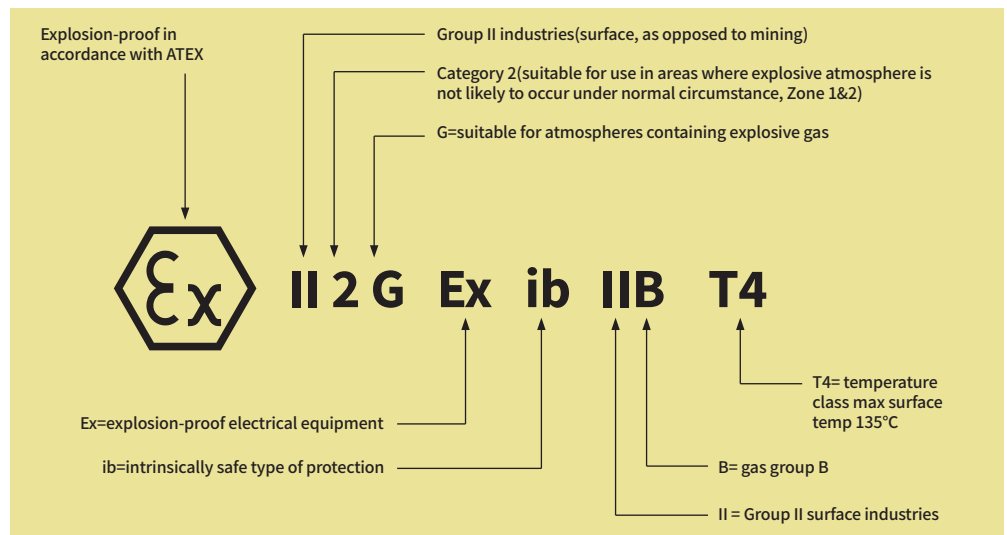· Backlighted graphic LCD with large digits

Functions

· Real time wind speed and direction

· Wind gust in last 2 min & bar graph

· Temperature

· 3 Programmable alarm relays with adjustable ON & OFF delay

· 4-20 mA industrial output, allows external devices connectivity

· Wind speed & alarm history graph in 8 hr

· Multiple display units connect to one sensor, synchronized monitoring

Item	Description
ATEX Explosion-proof Level	EX II 2 G EX ib T4
Wind Speed Measurement Range	0.3…50 m/s
Wind Speed Accuracy	+/- 3 %
Wind Speed Resolution	0.1 m/s
Units of Measurement	m/s, km/h, knots, mph, Bf
Wind Direction Measurement Range	0-360, no blank sector, contactless magnetic measuring principle
Temperature Measurement Range	-30…55°C
Temperature Resolution	0.5 °C
Dimensions - Sensor	height 210 mm; diameter cup to cup 120 mm
Dimensions - Receiver	150 x 80 x 55 mm
Operating voltage	12...24 V DC
Antenna input (receiver)	50 ohm, SMA connector
Data transmission	every 2 seconds
Measurement interval	2 seconds
Transmission frequency	868 MHz/ +10 dBm; 908 MHz, 922 MHz (requested by clients)
Battery - sensor	3.6V AA Lithium battery, Type:LS14500EX, Producer: SAFT
Audible alarm	85...90 dB
Relay Contacts Output	3 x relays, 2 A / 24 V
4-20 mA Output	4 mA=0 m/s, 20 mA=50 m/s (programmable)
Bluetooth	Yes. Range up to 30 m
Mounting	Optional Accessary Self-Leveling Mounting Bracket

Certificate

Explosion-proof in accordance with ATEX

Group II industries(surface, as opposed to mining)

Category 2(suitable for use in areas where explosive atmosphere is not likely to occur under normal circumstance, Zone 1&2)

G=suitable for atmospheres containing explosive gas

Ex=explosion-proof electrical equipment

ib=intrinsically safe type of protection

T4= temperature class max surface temp 135°C

B= gas group B

II = Group II surface industries

Instructions