

INTRODUCTION

Wind speed monitoring with two warning alarms.

Panel mount “96x48mm”.

Exclusive use with Anemo4403 RF or Anemo4403 RF BAT.

User-defined Pre-Alarm (ALARM1) and Alarm (ALARM2).

Analog output: 4-20 mA.

Industrial RF communication 802.15.4 2.4GHz, world-wide license free band.



FEATURES

Display

3-digit 7-segment display.

2 indicator LEDs of activated alarms “AL1 and AL2”.

WM44-P can be programmed in km/h or in MPH. *P07*

Selection between km/h and MPH at any time by pressing “SELECT”.

2 indicator LEDs of working mode. km/h or MPH.

Alarms

The alarm is triggered when the programmed value is reached or exceeded. An activation delay is included to prevent false alarms due to short gusts of wind.

An alarm is deactivated when the wind speed drops below the programmed threshold. A deactivation delay is also included.

Activation of ALARM2 deactivates ALARM1.

With ALARM2 activated the displayed wind speed blinks as a warning.

Alarm configurable characteristics: trigger values, polarity, intermittent or continuous operation, alarm latching (only ALARM2).

Alarm output: Relays. “ALARM1” contacts “NO” and “NC”, “ALARM2” contact “NO”. Voltage free relay contacts.

Wind speed sensors

FOR EXCLUSIVE USE with Anemo 4403 RF or Anemo 4403 RF BAT wind speed wireless sensor.

Analog output

4-20mA analog output proportional to displayed wind speed .

Preset user program

An alternate program configuration can be saved in memory. This preset configuration can be loaded at any time. *P00 - (3)*.

Minimum and Maximum wind speed registered values

WM44-P RF records automatically the Minimum and Maximum wind speed values. To see Minimum and Maximum values :

Lift up the frontal cover levering in the lower groove marked as “open to program”.

To visualize “Minimum” value, press ENTER button. To visualize “Maximum” value, press ENTER again. After 3 seconds, WM44-P RF will display the current wind speed.

To delete “Minimum” and “Máximum” values press “ESCAPE” button during 2 seconds.

Note: Both values will be deleted at power off.

PROGRAMMING

To access the programming push-buttons, insert a flat-head screwdriver into the groove marked as “open to program” and lever downwards to remove the front cover.

To enter program mode press “ENTER” and “ESCAPE” simultaneously for 2 seconds.

Button functions in program mode

Button	Function
UP	Increase program steps (P00,P01..), options or thresholds to program.
DOWN	Decrease program steps, options or thresholds to program.
ENTER	Enters the program step currently displayed, validates options and values and exits program step.
ESC	Returns to program steps. Selects the digit to be modified within the range.

Program steps :

- P00:** (1) Exit program mode without saving data, (2) Exit program mode saving data , (3) Exit program mode loading “preset user configuration”data, (4) Pressing “ENTER” for more than 10 seconds, exit program mode saving data as “preset user configuration”.
- P01:** (0) Programming in km/h , (1) Programming in MPH. < 0 >
- P04:** ALARM1 operation . (0) Disable, (1) OUT1 Rel closes NO contact , (2) OUT1 Rel opens NO contact. <1>
- P05:** ALARM1 activation threshold (1 - 999). <50>
- P06:** ALARM1 mode. (0) Continuous mode, (1) Intermittent mode. <1>
- P07:** ALARM1 time ON in intermittent mode (P06=1). Tenths of a second (1-999). <10>
- P08:** ALARM1 time OFF in intermittent mode (P06=1). Tenths of a second (1-999). <50>
- P09:** ALARM2 operation . (0) Disable, (1) OUT2 Rel closes contact , (2) OUT2 Rel opens contact . <1>
- P10:** ALARM 2. Same as P05 but for ALARM2. <70> (When this value is exceeded, the displayed value blinks as a warning).
- P11:** ALARM2. Same as P06 but for ALARM2. <0>
- P12:** ALARM2. Same as P07 but for ALARM2. <5>
- P13:** ALARM2. Same as P08 but for ALARM2. <5>
- P14:** ALARM2 Latch configuration. (0) Non-latching, (1) Latching. <0> (To release a latched alarm, WM44-P RF has to be powered off).
- P15:** Analog output configuration. (0) Analog output disabled, (1-999) Introduced value will match maximum analogue output (20 mA). <120>
- P16:** Timeout data reception. (5-99) Maximum time in seconds without receiving data from Anemo4403 RF . <12>
- P17:** Alarm status with Timeout error. (0) Alarms deactivation, (1) ALARM1 activation, (2) ALARM2 activation. <2>

P02 and **P03** do not exist.

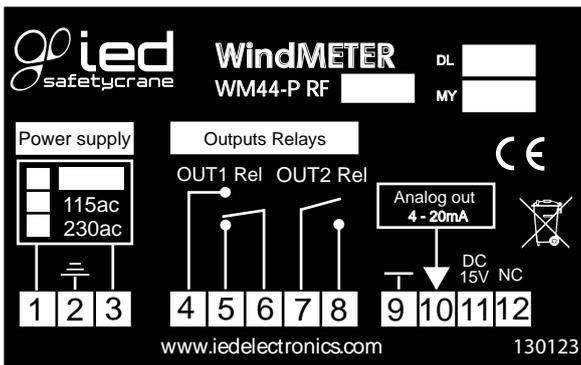
Notes:

- Factory default values are enclosed in angle brackets “< >”.
- Preconfigured factory values in compliance with ITC MIE-AME-2 :
Wind speed sensor model: Anemo 4403 RF or Anemo 4403 RF BAT.
ALARM1 is triggered at 50km/h, ALARM1 activation closes the relay contact, ALARM1 is intermittent (ton=1sec, toff=5 sec).
ALARM2 is triggered at 70km/h. ALARM2 close contacts NO. ALARM2 is continuous.
- Users may program WM44-P RF to comply with local safety regulations.

TECHNICAL CHARACTERISTICS

Power supply	230 Vac, 50-60 Hz (other options, contact IED electronics)
Power consumption	< 3,5VA
RF communication	IEEE 802.15.4. ISM 2.4 GHz Power transmission: 10mW (10dBm) Sensibitiy reception: -100dBm
Communicating range	Indoor/Urban : 60 m max. Outdoor. Line-of-sight: 750 m max.
Maximum measure	200 Km/h or 124 MPH
Accuracy	+ -2%
Analog output	4 - 20 mA
Maximum impedance connectable in the analog output	500 ohm
Analog output error (1000 working steps)	15 steps maximum
Non condensable relative humidity according to IEC 68-2-3 e IEC 68-2-27	
Impacts according to a IEC 68-2-27	
Vibrations according to IEC 68-2-6	
Storage temperature	-35 °C ... +70 °C
Operating temp. (ice free)	-20 °C ... +70 °C
IP Rating (front)	IP50
Weight	0,350 Kg (approx.)

Connections



WM44-P RF. Connections Label

Dimensions

