



**ME-61400**

## Anemometric station for Mini Eolic Monitoring Station



**VV-N**  
Wind Speed



**DV-N**  
Wind Direction



**Datalogger**  
TMF



- Wind measurement according to directives **IEC 61400** for heights up to **20m**.
- Complete system of **sensors, datalogger** and **alimentation system**.
- Instrumentation and datalogger by **NESA** production, certified **MeasNet** at DEWI, Germany.
- Immediate installation of masts in iron or aluminium **high from 4mt to 20mt**.
- **Real time visualization** of instantaneous data for every measure in **numeric** or **graphic** format.
- **Elaboration** of **minimum, medium** and **maximum**, of **gust** and **main direction**.
- **Data memorization both internal to datalogger** and in **USB removable memory** with registration capacity that guarantees a storage of **more than 4 years of data**. Files in **Excel®** format compatible.
- **Low consumptions**, with power supply from **solar panels**.
- Possibility of **data transmission from remote with GPRS/UMTS**.

## Technical Data



### Datalogger

#### TMF100 Terminal Unit

<i>Technology</i>	32bit processor with Embedded Linux operative system on board
<i>Analog/Pt:100/0÷2Vdc/4÷20mA Inputs</i>	n. 4 @ 12bit channels (Vmax 0÷2Vdc ; I 4÷20mA) n. 4/8 @ 24bit channels (Vmax 0÷2Vdc ; I 4÷20mA)
<i>Digital Inputs</i>	n. 5 ingressi digitali in frequenza (max 1000Hz) <i>n. 5 digital frequency input (max 1000Hz)</i>
<i>Communication ports</i>	n. 2 RS232 n. 2 USB Host n. 1 LAN Ethernet 10/100Mb
<i>Internal Data storage</i>	A partire da 32MB / Min 32MB
<i>External Data storage</i>	Pen-drive industriale USB >2GB
<i>Data-clock</i>	Sistema al quarzo e aggiornamento automatico via NTP <i>Quartz management and automatic NTP connection</i>
<i>Watch dog</i>	3 livelli di controllo con Reset hardware della Cpu   <i>3 different levels of control with Cpu hardware reset</i>
<i>Protections</i>	Contro corto circuiti e scariche indirette <i>Polarity reverse and transient</i>
<i>Programmability &amp; Remote control of:</i>	Localmente, rete LAN e da remoto tramite modem, GPRS, GSM, wireless, satellite, FTP. radio <i>In local via serial port, LAN, from remote via modem, GPRS, GSM, wireless, satellite, FTP. Radio</i>
<i>Current Consumption</i>	< 1W in funzionamento/ <i>full operation</i>
<i>Power supply</i>	24Vac, 110Vac, 220Vac (con trasformatore esterno), 10,5÷ 18Vdc, Pannello Solare, Generatore eolico   <i>24Vac, 110Vac, 220Vac (with external voltage transformer), 10,5÷ 18Vdc, Solar Panel, Aeolian supply</i>
<i>Operative temperature</i>	-45 ÷ 70 °C
<i>weight</i>	0,8 Kg
<i>Dimensions</i>	177x118x60mm
<i>Norms</i>	<b>CE, SIT</b> (on request)
<i>(optional) IP65 Box – IP68</i>	300x400x220mm (standard)

## Anemometric sensors

### Wind Speed

(available in heated version with low consumption 4W@12Vdc).

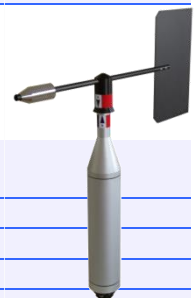
<i>typical measurement range</i>	0 ÷ 50 m/s (raffiche/ <i>blasts</i> >80 m/s)
<i>accuracy</i>	0.1 m/s (0,4 ÷ 30m/s); ± 2% v.m. (>30 m/s)
<i>Typical Linearity</i>	r> <b>0.99998 (Measnet certified)</b> standard error 0.02m/s
<i>starting threshold</i>	stopping 0.2 m/s; starting <0.3 m/s
<i>standard signal output</i>	Impulsi / <i>pulses</i> ( 0÷2Vdc; 4÷20mA)
<i>Certifications/Calibrations</i>	MeasNet, SIT, Dewi



### Wind direction

(available in heated version with low consumption 4W@12Vdc)

<i>typical measurement range</i>	0 ÷ 360° (raffiche/ <i>blasts</i> 0 ÷ 70 m/s)
<i>accuracy</i>	± 1°
<i>starting threshold</i>	0.25 m/s
<i>standard signal output</i>	Potenziometro (0÷2 Vdc; 4÷20mA)
<i>Certifications/Calibrations</i>	DKD, SIT



For more details see technical brochure of anemometer