

PRICE LIST CALIBRATED SENSORS: 08/'16

Accredited as Testing and as Calibration Laboratory for IEC, FGW and MEASNET conform wind measurements, anemometer and wind vane calibrations and power performance measurements



Anemometer (Wind Speed Sensor)

Thies First Class Advanced

PRICE LIST METEOROLOGICAL MEASUREMENT MASTS: 08/'16

- First Class in accordance to IEC 61400-12-1 and FDIS 61400-12-1 Ed.2
- Worldwide the only Class S 0.5 anemometer according IEC 61400-12-1 (2005-12), ISO 17713-1, MEASNET
- Measurement Range: 0.3...75 m/s
- Accuracy: 1% of value or <0.2 m/s (0.3...50m/s)
- Survival Wind Speed 80 m/s (≥ 30 min)
- Linearity: $r > 0.99999$ (4...20 m/s)
- IP 55



€ 525,00

Thies First Class Advanced - refurbished

- First Class in accordance to IEC 61400-12-1 and FDIS 61400-12-1 Ed.2
- Worldwide the only Class S 0.5 anemometer according IEC 61400-12-1 (2005-12), ISO 17713-1, MEASNET
- Measurement Range: 0.3...75 m/s
- Accuracy: 1% of value or <0.2 m/s (0.3...50m/s)
- Survival Wind Speed 80 m/s (≥ 30 min)
- Linearity: $r > 0.99999$ (4...20 m/s)
- IP 55
- 1-year warranty provided for refurbished sensor



€ 450,00

Thies Compact

- Measurement Range: 0.5...50 m/s
- Accuracy: ± 0.5 m/s or 3% of measurement value
- Resolution: 0.1 m/s
- Survival Wind Speed 80 m/s (≥ 30 min)
- Opto-electronic principle
- Ambient Temp.: -40 ... +70 °C
- IP 55



€ 250,00

Vector Instruments A100LK / A100LM / A100R/K

- First Class in accordance to IEC 61400-12-1 and FDIS 61400-12-1 Ed.2
- Low Power Pulse output
- R30/K rotor
- Accuracy: 1% of value ± 0.05 m/s (10...55m/s) or 0.1 m/s (0.3...10m/s)
- #405-PV (25mm) Mounting Adapter



€ 660,00



Connector 405 PV



€ 35,00

WindSensor P2546: P2546A-OPR and P2546C-OPR

- calibrated according to IEC and MEASNET standard
- First Class in accordance to IEC 61400-12-1 and FDIS 61400-12-1 Ed.2
- Measurement Range: <0.4...75 m/s
- Operating temperature range -38...60 °C
- Operating humidity range 0...100% RH
- P2546A-OPR Self-excited, pull-up resistor of 10...100 kΩ required
- P2546C-OPR Self-excited, no external power supply required



€ 850,00

R. M. Young Gill Propeller Anemometer - 27106

- 08274 Expanded Polystyrene Propeller (EPS)
- Diameter: 22 cm
- Pitch: 29.4 cm wind passage per revolution
- Range: 0-25 m/s (55 mph)
- Threshold:* 0.3 m/s (0.6 mph)
- Distance constant:* 1.0 m (3.2 ft)
- self-powered
- Mounting with MS type connector: ¾ (26.9mm) pipe thread adapter
- calibrated in MEASNET Member wind tunnel



€ 600,00

R. M. Young Gill Propeller Anemometer - 27106T

- 08254 Carbon Fiber Thermoplastic Propeller (CFT)
- Diameter: 20 cm
- Pitch: 30 cm wind passage per revolution
- Range: 0-24 m/s (80 mph)
- Threshold:* 0.4 m/s (0.8 mph)
- Distance constant:* 2.1 m (6.9 ft)
- self-powered
- Mounting with MS type connector: ¾ (26.9mm) pipe thread adapter
- calibrated in MEASNET Member wind tunnel



€ 630,00

MEASNET wind tunnel calibration according to IEC 61400-12-1 and FDIS IEC 61400-12-1 Ed.2

- MEASNET Anemometer Calibration according to IEC 61400-12-1 and FDIS IEC 61400-12-1 Ed.2



€ 95,00



Ultra sonic Anemometer: Thies 1D Ultrasonic Anemometer

- Accredited calibration in a MEASNET member wind tunnel
- Measurement variables possible: horizontal components of wind velocity and wind direction as well as the virtual temperature in 1 dimension
- Wind measurement range: [0 ... 75 m/s]
- Wind direction measurement range: 0° (1°) / 180° (181°) and „calm“
- virtual temperature measurement range: - 50°C ... +70°C
- Survival wind speed: min. 80 m/s for min. 30 minutes
- Accuracy in rms, mean over 360° (wind speed):
≤ 5m/s: ± 0.1 m/s, > 5 m/s: ± 2%
- Accuracy virtual temperature): ± 5K to 35 m/s
- Resolution (wind speed): 0.1 m/s (except telegrams 6, 7 & 10), <0,1 m/s in user-defined telegram 6
- Resolution (virtual temperature): 0.1 K (except telegrams 6, 7 and 10)
- Sample rate: 0.1 Hz ... 100 Hz
- Operating temperature range: -30°C to 80°C (unheated); -50°C to 80°C (heated)
- Thread diameter for mounting: 1 1/2" (~48mm) (adapter 1" to 1 1/2" optional)
- extreme high precision
- maintenance free
- digital /analogue in- and outputs
- IP 67



€ 1.695,00

Ultra sonic Anemometer: Thies 2D Ultrasonic Anemometer

- Accredited calibration in a MEASNET member wind tunnel
- Measurement variables possible: horizontal components of wind velocity and wind direction as well as the virtual temperature in 2 dimensions
- Wind measurement range: [0.01 ... 75 m/s]
- Wind direction measurement range: 0 ... 360° (0...540°, 0...720° analogue adjustable)
- virtual temperature measurement range: - 50°C ... +70°C
- Survival wind speed: min. 80 m/s for min. 30 minutes
- Accuracy in rms, mean over 360° (wind speed):
≤ 5m/s: ± 0.1 m/s, > 5 m/s: ± 2%
- Accuracy (wind direction): ± 1.0°
- Accuracy virtual temperature): ± 5K to 35 m/s
- Resolution (wind speed): 0.1 m/s (except telegrams 6 & 10), 0.01 m/s in user-defined telegram 6
- Resolution (wind direction): 1° (except telegrams 6 & 10), < 1° in user-defined telegram 6
- Resolution (virtual temperature): 0.1 K (except telegrams 6 and 10)
- Sample rate: 0.1 Hz ... 100 Hz
- Operating temperature range: -30°C to 80°C (unheated); -50°C to 80°C (heated)
- Thread diameter for mounting: 1 1/2" (~48mm) (adapter 1" to 1 1/2" optional)
- extreme high precision
- maintenance free
- digital /analogue in- and outputs
- IP 67



€ 2.065,00



Ultra sonic Anemometer: Thies 3D Ultrasonic Anemometer

- Accredited calibration in a MEASNET member wind tunnel
- Measurement variables possible: horizontal and vertical components of wind velocity and wind direction as well as the virtual temperature in 3 dimensions
- Wind measurement range: [0.01 ... 85 m/s]
- Wind direction measurement range: azimuth: 0 ... 360° (0...540°, 0...720° analogue adjustable); elevation: -90° ... +90°
- virtual temperature measurement range: - 40°C ... +70°C
- Survival wind speed: min. 80 m/s for min. 30 minutes
- Accuracy in rms, mean over 360° (wind speed): $\leq 5 \text{ m/s}$: $\pm 0.1 \text{ m/s}$, $> 5 \text{ m/s} \leq 35 \text{ m/s}$: $\pm 1\%$, $> 35 \text{ m/s} \leq 65 \text{ m/s}$: $\pm 2\%$, $> 65 \text{ m/s} \leq 85 \text{ m/s}$: $\pm 3\%$,
- Accuracy (wind direction): $\pm 1^\circ$ ($> 1 \text{ m/s} \leq 35 \text{ m/s}$), $\pm 2^\circ$ ($> 35 \text{ m/s} \leq 65 \text{ m/s}$), $\pm 4^\circ$ ($> 65 \text{ m/s} \leq 85 \text{ m/s}$)
- Accuracy virtual temperature: $\pm 0.5 \text{ K}$
- Resolution (wind speed): 0.1 m/s (telegrams 1 to 4), 0.01 m/s in user-defined telegrams 5 to 12
- Resolution (wind direction): 1° (in telegrams 1 to 4); 0.1° (in telegrams 5 to 12)
- Resolution (virtual temperature): 0.1 K (in telegrams 1 to 5)
- Sample rate: 0.1 Hz ... 100 Hz
- Operating temperature range: -30°C to 80°C (unheated); -50°C to 80°C (heated)
- Thread diameter for mounting: 1 1/2" (~48mm) (adapter 1" to 1 1/2" optional)
- extreme high precision
- maintenance free
- optional with different heating characteristics
- digital /analogue in- and outputs
- IP 67



€ 3.350,00

Anemometers

Accredited Ultra Sonic Anemometer Calibration in MEASNET member wind tunnel

- 1D
- Wind speed: at 1 wind direction with 23 points at 13 wind speeds



€ 95,00

Accredited Ultra Sonic Anemometer Calibration in MEASNET member wind tunnel

- 2D
- wind speed: in 4 azimuth positions, each 23 points at 13 wind speeds
- Wind direction for 380°



€ 515,00

Accredited Ultra Sonic Anemometer Calibration in MEASNET member wind tunnel

- 3D
- For 3 tilt angles:
- wind speed: in 4 azimuth positions, each 23 points at 13 wind speeds
- Wind direction for 380°



€ 1.545,00



Wind Vanes

Thies First Class

- potentiometer 0 ... 10.0 kOhm = 0 ... 360 degrees or
- potentiometer 0 ... 2.0 kOhm = 0 ... 360 degrees
- Measurement range: 0...360°
- dead band: without North Gap
- Accuracy: 0.25% (1°)
- Linearity: 0.25% (1°)
- Resolution: 0.35°
- Survival speed: 85m/s (>30min)
- IP 55



€ 745,00

Thies Compact

- potentiometer 0 ... 2.0 kOhm = 0 ... 360 degrees
- Measurement range: 0...360°
- dead band: <2°
- Resolution: 0.4°
- Accuracy: 0.5% (±2°)
- Survival speed: 80m/s (>30min)
- IP 55



€ 490,00

Vector Instruments W200P/First Class

- potentiometer 0 ... 1 kOhm ±10% = 0 ... 360 degrees
- Measurement range: 0...356.5°
- dead band: 2.3° (continuity) / 3.5° (variation)
- Accuracy: ± 2°
- Linearity: ± 0.25% (±1°)
- Resolution: ± 0.2°
- Survival speed: 75m/s



€ 770,00

Connector 405 PV



€ 35,00

Calibration according to FDIS IEC 61400-12-1 Ed.2 in a MEASNET member wind tunnel



€ 135,00



Data Logger (incl. control and data read-out software)

Ammonit Meteo 40-S/M/L data logger

- 4/8/12x analog voltage IN
- 1/1/2x analog current IN
- 4/8/12x pulse counter IN
- 2/4/8x digital serial IN
- RS485 IN
- 2/4/8x analog voltage OUT
- 1/1/2x analog current OUT
- RS485 OUT
- USB, LAN, WLAN (access via USB WiFi modem) access
- >50 MB storage for CSV data (statistics) & 1/2/2GB storage for 1Hz raw data
- IP 65



€ 1.900,00

(valid for model: 40-M)

Calibration Meteo-M40 (compliant to recommendations of FGW TR6 Rev.9, IEC and MEASNET)

€ 230,00

Campbell Scientific CR1000

- 16x analogue single-ended or 8 differential IN
- 2x digital pulse counters IN
- 8x digital IN/OUT
- 3x analogue voltage OUT
- 1x switched 12V OUT
- RS232
- CS I/O PORT, SDI-12, Peripheral ports
- CF-card, USB, LAN, WLAN (optional)
- 2/4 Mbytes SRAM memory
- surge protection for all Inputs by gas discharge tube (GDT)
- surge protection for critical Outputs by GDT or transient voltage suppression diodes
- power feeding protected by transzorb diodes
- grounding socket for electrostatic discharge (ESD) protection



€ 1.510,00

Calibration CR1000 (compliant to recommendations of FGW TR6 Rev.9, IEC and MEASNET)

€ 180,00



Campbell Scientific CR6

- Calibration CR1000 (compliant to recommendations of FGW TR6 Rev.9, IEC and MEASNET)
- 12x single-ended or 6xy differential freely programmable analog or digital IN & OUT
- 4x digital pulse counters IN an/or 4x analog voltage OUT (5 and 3.3V)
- 2x switched 12V OUT
- 1x RS232 / RS485
- CS I/O PORT
- LAN
- USB
- RJ-45
- micro-SD card
- WLAN (optional)
- 4 Mbytes SRAM memory
- surge protection for all Inputs by gas discharge tube (GDT)
- surge protection for critical Outputs by GDT or transient voltage suppression diodes
- power feeding protected by tranzorb diodes
- grounding socket for electrostatic discharge (ESD) protection
- IP 50



€ 1.970,00

Calibration CR6 (compliant to recommendations of FGW TR6 Rev.9, IEC and MEASNET)

€ 180,00

Campbell Scientific CR850

- Keypad
- LCD Display
- 6x analog single-ended or 3 differential IN
- 2x digital pulse counters IN
- 4x digital IN/OUT
- 3x analog voltage OUT
- 1x switched 12V OUT
- RS232
- CS I/O PORT
- 2/4 Mbytes SRAM memory
- One program-status LED
- surge protection for all Inputs by gas discharge tube (GDT)
- power feeding protected by tranzorb diodes
- grounding socket for electrostatic discharge (ESD) protection



€ 1.400,00

Calibration CR850 (compliant to recommendations of FGW TR6 Rev.9, IEC and MEASNET)

€ 180,00



Campbell Scientific CR3000

- 28x analog single-ended or 14 differential IN
- 4x digital pulse counters IN
- 3 SDM and 8 I/Os or 4 RS-232 COM I/O ports can be paired IN/OUT
- 4x analog voltage OUT
- 3x analog current OUT
- 2x switched 12V OUT
- RS232
- CS I/O PORT
- parallel peripheral
- Integrated 12-key keyboard and display screen
- 2/4 Mbytes SRAM memory
- 100 Hz
- One program-status LED
- surge protection for all Inputs by gas discharge tube (GDT)
- power feeding protected by tranzorb diodes
- grounding socket for electrostatic discharge (ESD) protection



€ 3.000,00

Calibration CR3000 (compliant to recommendations of FGW TR6 Rev.9, IEC and MEASNET)

€ 180,00

Control Cabinet incl. Terminals, Anti Corrosion, Surge Protection (optional: cold climate edition)

Lockable cabinet 500 x 700

- mast support
- all necessary terminal connectors to connect sensors, modem, data logger and power supply
- complete internal wiring, clamps, etc
- individual connection scheme provided
- IP 56 / IP 66



€ 350,00

Lockable cabinet 500 x 700 - Cold Climate

- mast support
- all necessary terminal connectors to connect sensors, modem, data logger and power supply
- complete internal wiring, clamps, etc
- individual connection scheme provided
- insulated and black surface
- IP 56 / IP 66



€ 450,00

Electricity Supply System (for lockable cabinet)

Power supply, „Standard“ for measurement system only

- 1x charge regulator Solarix PR1010
- 1x battery (VRLA-AGM) 12V, 50 Ah (maintenance free, non-spillable, incl. safety data sheet for aviation transport)
- 1x solar panel 40Wp (2.0 m cable) incl. mast support



€ 300,00



Power supply, „Advanced“ for measurement system and aviation signal lights

- 1x charge regulator Solarix PR1010
- 1x battery (VRLA-AGM) 12V, 50 Ah (maintenance free, non-spillable, incl. safety data sheet for aviation transport)
- 2x solar panel 40Wp (2.0 m cable) incl. mast support



€ 390,00

Power Supply Aviation Signal Light: standard power (individual power supply for low and medium aviation lights and Type A or B)

- 1x shelter box ca. 300 x 400, incl. mast support
- 1x battery (VRLA-AGM) 12V , 50 Ah (maintenance free , non-spillable, incl. safety data sheet for aviation transport)
- 1x solar panel 40Wp (2.0 m cable) incl. mast support
- 1x solar charge regulator Solarix PR1010



€ 500,00

Power Supply Aviation Signal Lights: high power (individual power supply for high intensity aviation lights and Type C)

- 1x shelter box ca. 500 x 500, incl. mast support
- 1x battery (VRLA-AGM) 12V , 50 Ah (maintenance free , non-spillable, incl. safety data sheet for aviation transport)
- 2x solar panel 40Wp (2.0 m cable) incl. mast support
- 1x solar charge regulator Solarix PR1010



€ 590,00

Aviation Signal Lights and Flash Controller (FAA and/or ICAO compliant)

Low intensity aviation light ICAO Typ A

- 1x light, type Obelux LI-10-DCW-F, intensity 10 cd
 - 1x mounting boom, length approx. 0.5 m
 - 1x cable to connect the light and the flashing unit
 - compliant to ICAO International Standards and Recommended Practices: Aerodromes – Annex 14 Volume 1, 5th Edition, July 2009, Chapter 6: Low- intensity, Type A Fixed Obstacle Light
- In combination with flash controller & photocell: PCFL-DC1-TB:
- Integrated photocell, user selectable sensitivity: off, 200 lux, 400 lux, 800 lux (default)
 - integrated flash controller: steady (default), 20 fpm, 40 fpm, 60 fpm (250 ms flash duration)



€ 390,00



Medium intensity aviation light ICAO Typ B and FAA

- 1x light, type Obelux LI-32-DCW-F, intensity 32 cd
- 1x mounting boom, length approx. 0.5 m
- 1x cable to connect the light and the flashing unit
- compliant to ICAO International Standards and Recommended Practices: Aerodromes – Annex 14 Volume 1, 3rd Edition, July 1999, Chapter 6: Low- intensity, Type B Fixed Obstacle Light
- compliant to FAA Advisory Circular 150/5345-43E 10/19/95 L-810 Light Unit

In combination with flash controller & photocell: PCFL-DC1-TB:

- Integrated photocell, user selectable sensitivity: off, 200 lux, 400 lux, 800 lux (default)
- integrated flash controller: steady (default), 20 fpm, 40 fpm, 60 fpm (250 ms flash duration)



€ 450,00

Low intensity aviation light ICAO Typ A

- 1x light, type Obelux LI-10-DCW-PCFL, intensity 10 cd
- Integrated photocell, user selectable sensitivity: off, 200 lux, 400 lux, 800 lux (default)
- integrated flash controller: steady (default), 20 fpm, 40 fpm, 60 fpm (250 ms flash duration)
- 1x mounting boom, length approx. 0.5 m
- 1x cable to connect the light and the flashing unit
- compliant to ICAO International Standards and Recommended Practices: Aerodromes – Annex 14 Volume 1, 5th Edition, July 2009, Chapter 6: Low- intensity, Type A Fixed Obstacle Light



€ 480,00

Medium intensity aviation light ICAO Typ B and FAA

- 1x light, type Obelux LI-32-DCW-PCFL, intensity 32 cd
- 1x mounting boom, length approx. 0.5 m
- Integrated photocell, user selectable sensitivity: off, 200 lux, 400 lux, 800 lux (default)
- integrated flash controller: steady (default), 20 fpm, 40 fpm, 60 fpm (250 ms flash duration)
- 1x cable to connect the light and the flashing unit
- compliant to ICAO International Standards and Recommended Practices: Aerodromes – Annex 14 Volume 1, 3rd Edition, July 1999, Chapter 6: Low- intensity, Type B Fixed Obstacle Light
- compliant to FAA Advisory Circular 150/5345-43E 10/19/95 L-810 Light Unit



€ 500,00

Flash controller type PCFL-DC1-TB (12-48 V)

- flash controller with photo cell, incl. overvoltage protection
- flashing rate: steady/20/40/60 per minute; duration: 250 ms
- threshold sensitivity: 200/400/800 lux can be chosen



€ 140,00



GSM (GPRS / UMTS) and Satellite Modems

GSM & GPRS modem maestro 100evo Advance, Quad Band

- GSM and GPRS
- Voice / Fax / SMS and Data
- Quad Band 850 / 900 / 1800 / 1900 MHz
- RS232
- 1x digital input, 1x digital output
- GSM Antenna incl. Mast support



€ 200,00

CDMA modem maestro M100 CDMA plus

- CDMA2000 1x(RTT)
- 800/1900MHz
- RS232
- USB 2.0
- 2x digital input
- GSM Antenna incl. Mast support



€ 260,00

GSM & GPRS modem maestro M100 3G XT

- Dual or tri-band (850/1900, 900/2100 or 800/850/2100)
- HSDPA (WCDMA)
- Voice / Fax / SMS and Data
- RS232
- USB 2.0
- 1x digital input, 2x digital output
- GSM Antenna incl. Mast support



€ 270,00

Uni-directional Antenna

- GSM/GPRS/EDGE/UMTS/WLAN
- 800-2500 MHz (824-960 MHz and 1710-2500 MHz)
- 11 dBi amplifying characteristics for rural, remote transmission



€ 110,00

Satellite modem Hughes 9502

- Satellite Transmit Frequency 1626.5–1660.5 MHz
- Satellite Receive Frequency 1525–1559 MHz
- GPS Frequency 1574.42–1576.42 MHz
- Mast support
- SIM Card and costs for data transmission for 12 month is included



€ 2.500,00

Satellite modem Campbell Scientific: Iridium 9522B and COM9522B Interface

- Satellite Receive Frequency 1616 MHz to 1626.5 MHz
- Mast support
- Global coverage for data communication with any station that has a view of the sky
- On demand, two-way communication
- No antenna pointing required—omnidirectional antenna included
- Supports dial-up, RUDICS, and SBD communications



€ 2.340,00



Barometric pressure sensors

Barometric pressure sensor P-GE 6/11

- 600...1100hPa
- IP 54
- reverse and over voltage protection
- factory calibration incl. certificate



€ 200,00

Barometric pressure sensor P-GE 8/11

- 800...1100hPa
- IP 54
- reverse and over voltage protection
- factory calibration incl. certificate



€ 200,00

Barometric pressure sensor Vaisala PTB101 B

- Resolution: 0.1 hPa
- 600...1060 hPa
- Long-term stability ± 0.1 hPa/year
- Accuracy ± 0.5 hPa at +20 °C
- Operating Temperature: -40...+60 °C



€ 250,00

Barometric pressure sensor Vaisala PTB110

- 500...1100 hPa
- Long-term stability ± 0.1 hPa/year
- Several pressure ranges
- Accuracy ± 0.3 hPa at +20 °C
- IP 32



€ 350,00

Temperature and Humidity sensors

Temperature and humidity sensors GalltecMela KPC1.S/5-ME

- measurement range T: -30...70 °C
- measurement range rH: 0...100 %rH
- -27 ... 80 °C = 0 ... 1.0 V (accuracy ± 0.2 °K)
- 0 ... 100 %rH = 0 ... 1.0 V (accuracy $\pm 2\%$ rH)
- weather and radiation shielding incl. mounting unit
- calibration certificate in accordance to EN 10 204 - 2.2



€ 210,00

Temperature and humidity sensors GalltecMela KPC1.S/5-ME-R05 (cold climate model)

- measurement range T: -40...60 °C
- measurement range rH: 0...100 %rH
- -27 ... 80 °C = 0 ... 1.0 V (accuracy ± 0.2 °K)
- 0 ... 100 %rH = 0 ... 1.0 V (accuracy $\pm 2\%$ rH)
- weather and radiation shielding incl. mounting unit
- connection cable 5.0 m
- calibration certificate in accordance to EN 10 204 - 2.2



€ 210,00



Temperature and Humidity sensors

Temperature sensor GalltecMela TPC1.S/x-ME

- -27 ... 80 °C = 0 ... 1.0 V (accuracy $\pm 0.2^\circ$ K)
- weather and radiation shielding incl. mounting unit
- connection cable 5.0 m
- calibration certificate in accordance to EN 10 204 - 2.2



€ 200,00

Weather and radiation protection housing



€ 170,00

Pluviometer (Rain Gauge Sensor)

Rain Gauge Sensor Young 52203

- 200 cm²
- precision: 2 % \leq 25 mm/hr, 3 % \leq 50 mm/hr
- scale 0.1 mm/tip
- analog output: reed switch, 24 VAC/DC 500 mA



€ 600,00

Pyranometer (Solar Radiation Sensor)

Pyranometer global radiation, Campbell Scientific CS300

- 300...1100 nm (or more)
- 0...2000 W m⁻² (full sunlight \approx 1000 W m⁻²)
- self-powered
- accuracy: $\pm 5\%$ for daily total radiation
- sensitivity: .005 kW m⁻² mV-1



€ 450,00

Calibration Laboratory



ProfEC Ventus GmbH
Im Ofenerfeld 23
26127 Oldenburg
Germany

www.profec-ventus.com
info@profec-ventus.com



Online Shop



ProfEC Ventus GmbH
Marie-Curie-Str. 1
26129 Oldenburg
Germany

<http://shop.profec-ventus.com>
info@profec-ventus.com



closer, committed, competitive



PRICE LIST METEOROLOGICAL MEASUREMENT MASTS: 08/'16

| Met Mast | Supply only (EUR) | Supply & Supervision (EUR) | Supply & Install (EUR) |
|----------|-------------------|----------------------------|------------------------|
| 80m | 39.078 | 48.601 | 62.603 |
| 100m | 46.068 | 56.422 | 71.095 |
| 120m | 55.822 | 67.005 | 86.251 |
| 140m | 67.330 | 79.343 | 100.161 |

NOTES:

Supply only:
Ex-Works

Supply & Supervision:
including all additional costs for project management services and supervision of bankable, accredited installation and commissioning of the met mast.

Supply & Install:
including all additional costs for our installation team.

Lattice Wind Measurement Masts (Standard Scope of „Supply only“)

| | |
|--|---|
| <p>1 lattice tower, including:</p> <ul style="list-style-type: none"> ▪ guy wires ▪ anchors, guy wires and base plate ▪ 1 x top boom (vertical for one or U-form for 2 sensor(s)) ▪ 6(5)x horizontal, side mounted booms ▪ lightning ro, $\geq 60^\circ$ protection umbrella, $\geq 50D$ (IEC and MEASNET conform) ▪ Foundations | <p>hot-dip galvanized steel, anti corrosive kit (advanced)</p> |
| Operational Lifetime | approx. 10 years if maintained well and in accordance to manufacturers specifications |
| Guarantee (if accordingly maintained by authorized personnel) | 1 year |
| Gin pole or winch + lift-boom/pulley | included |
| Special Installation Equipment | <p>4xgrip hoists and wire ropes</p> <p>30x wire rope hoists nominal load ~ 2 kN incl. 30x temporary eyelet</p> <p>1x hoisting equipment (shackles, etc)</p> <p>Standard equipment and further consumables</p> |



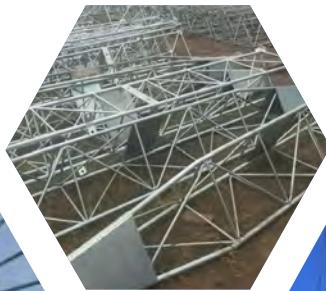
| Optional Equipment for Lattice Masts | | EUR |
|--|--|--------------|
| Surcharge mast kit - Premium: increased over voltage and over current protection against electrostatic discharge protection (yielding low system resistance, in many cases usually less than $\approx 4\Omega$ and earthing anchors, but strongly depends on ground conditions, type and humidity) by: | lighting conductor from lightning rod down to ground ($A = 50\text{mm}^2$) 3x ground lighting belt ($A \geq 10\text{mm}^2$) galvanic separation of sensors from mast structure galvanic separation of measurement system from mast structure 4x deep grounding rods / anchors with absorbents individual grounding of measurement mast system individual grounding of measurement mast | 1.000 |
| Red-White Painting | FAA compliant | 12 EUR/meter |
| Crow nest climbing barrier (can be used as platform) | Crow nest, lockable. | 500 |
| Working platform | Platform, lockable | 500 |
| Climbing barrier for trusses | lockable | 500 |



Crow Nest
(also serves
as platform)



Crow Nest
(also serves
as platform)



Working
Platform
(lockable)



Barrier for
trusses
(lockable)

