

Meteo-40 plus Data Logger

M11020/M21020/M31020

- Wind and Solar Resource Assessment
- Wind Farm Monitoring (SCADA)
- Power Performance Measurements
- Compliant with IEC 61400-12-1
- User-friendly configuration
- Secure IT architecture
- Several inputs and outputs for various measuring purposes



New developments

LTE and 4G

- Meteo-40 plus supports **modems** with LTE and 4G (e.g. PLS8-E and many more)

User management

- Admin user can create new users or delete them.
- Predefined users can be deleted.

Linux

- Meteo-40 plus runs with a later Linux version and newer versions of security libraries like GnuPG, OpenSSH, and OpenSSL
- Data can be sent with FTPS

Web Interface and Email

- TLS 1.1, 1.2, and 1.3 are supported.

SCADA

- Less latency in SCADA systems due to faster Modbus RTU and TCP

Various inputs and outputs for different measurement purposes

USB | Ethernet connection

USB-A ports for modem, wireless adapter or memory device
 USB-B port for PC;
 Ethernet port for Router, SAT-Modem, LAN or SCADA

Display & Keys

User-friendly menu to configure and check data logger settings

Analog Current

for sensors with output current

RS485 master for ultrasonic anemometers and smart sensors
RS485 slave for SCADA

Analog Voltage

for air pressure sensors, temperature humidity sensors, pyranometers, etc.

5 V | Switches for modem and sensor heating control, etc.



Pulse Counter

for anemometers, precipitation sensors, etc.

Digital / Serial / Status

for serial wind vanes (e.g., Thies TMR), precipitation monitor, ext. activation, etc.

		Meteo-40S plus	Meteo-40M plus	Meteo-40L plus	Description
Order Number		M11020	M21020	M31020	
Input Channels	Pulse Counters	4	8	12	Anemometers, precipitation sensors
	Digital Serial (Status)	2	4	8	Wind vanes serial, precipitation monitors, ext. activation
	Analog Voltage	4 ± 0.1 V, ± 1 V, ± 10 V 16 bit	8 ± 0.1 V, ± 1 V, ± 10 V 16 bit	12 ± 0.1 V, ± 1 V, ± 10 V 16 bit	Air pressure, temperature, humidity sensors, pot. wind vanes, pyranometers, pyrhemometers
	Analog Current	1 ± 1 mA, ± 10 mA, ± 100 mA 16 bit	1 ± 1 mA, ± 10 mA, ± 100 mA 16 bit	2 ± 1 mA, ± 10 mA, ± 100 mA 16 bit	Sensors with DC output, e.g., temperature humidity sensor (0 ... 20 mA)
	RS485 (M)	(1) RS485 Master for up to 8 smart sensors			Ultrasonic anemometers and smart sensors
Output Channels	RS485 (S)	(1) RS485 Slave			SCADA monitoring software
	5 V Switches	2	4	8	Sensor supply, relay for modem, heating supply
	Current Source	1	1	2	Pt1000, Pt100
Connectivity	USB	(2) USB-A host (1) USB-B device			PC, modem, memory stick, WiFi, GPS, web cam
	Ethernet	(1) Ethernet			Router, SAT-Modem, LAN and SCADA output
	Data transfer	Email, FTP, SCP, SFTP, FTPS, Datacopy on USB-Stick, SCADA			
	Data cloud	SCP to AmmonitOR			https://or.ammonit.com
	Remote control	SSH reverse tunnel through AmmonitConnect Server			<a href="https://<serialnumber>.connect.ammonit.com/">https://<serialnumber>.connect.ammonit.com/
Storage Size	Source Data (1-sec data)	1 GB	2 GB	2 GB	
	CSV Data (10-min data)	> 50 MB			
Display & Keys		(20 x 4) LC display with backlight, five keys			
Power Supply		9 ... 36 V DC			
Operat. temperature		-40 ... +65 °C			
Protection (Housing)		IP65			
Housing Dimensions		260 x 194 x 50 mm			
Weight		950 g			
Accessories		External modules, plug connector, mounting kit, steel cabinet			

User-friendly configuration via multilingual web interface

Easy configuration of measurement devices and communication methods using wizards in the Meteo-40 plus web interface. Conveniently access the web interface in your browser via **encrypted HTTPS connection**.

New: Connection via AmmonitConnect

<https://<serialnumber>.connect.ammonit.com/>



AmmonitConnect

Sensor library and channel overview

- Sensor configuration via wizards
- Real-time values
- RS485-M serial console

Label	Type	Model	Height	Serial No.	Rate	Channels	Change	Delete
Top Anemometer	Anemometer	Thies Anemometer First Class Advanced	120		1 s	C1	Change	Delete
Backup Anemometer	Anemometer	Thies Anemometer First Class Advanced	118		1 s	C2	Change	Delete
Middle Anemometer	Anemometer	Thies Anemometer First Class Advanced	60		1 s	C3	Change	Delete
Low Anemometer	Anemometer	Thies Anemometer First Class Advanced	10		1 s	C4	Change	Delete
Top Wind Vane	Wind Vane	Thies Wind Vane 10 Bits Serial Synchron	120		1 s	D1	Change	Delete
Backup Wind Vane	Wind Vane	Thies Wind Vane 10 Bits Serial Synchron	118		1 s	D2	Change	Delete
Low Wind Vane	Wind Vane	Thies Wind Vane 10 Bits Serial Synchron	60		1 s	D3	Change	Delete
Hygro/Thermo @10.0m	Hygro/Thermo	Galltec Hygro-Thermo Active KP	10		1 s	A1, A2	Change	Delete
Barometer @10.0m	Barometer	Barometric Pressure Sensor AB60	10		1 s	A3	Change	Delete

[Add sensor](#)
[Delete all sensors](#)
[RS485-M serial console](#)

Data monitoring with AmmonitOR data cloud

- Monitor state of measurement
- Data archiving
- Report generation
- Automatic data forwarding



AmmonitOR

AmmonitOR server
 Ammonit AmmonitOR

AmmonitOR project key

Server

Port

Username

Start date (YYYY-MM-DD)

Send CSV files

Send logbook data

Send configuration file

Send camera image

Send data snapshot

Send gust data files

Send secondary CSV files

Send tertiary CSV files

[Save](#)

[Save and copy test data](#)

[Reset send status](#)

[Download SSH key](#)

[Link to AmmonitOR](#)

Web interface

- Clearly structured
- User-friendly designed
- Multilingual

