Communication Methods and Required Devices

Meteo-40 data loggers offer various methods for data transfer and communication. All available methods are commonly used as well as easy to handle and to configure. Additional devices are necessary to set up the connections, e.g. W-LAN USB stick or modem.

Accessing the Meteo-40 web interface via tunnel server

Meteo-40 can be connected directly to a tunnel server to obtain a unique subdomain. This way the GSM modem can be equipped with a standard SIM card with dynamic IP address. The tunnel server manages the subdomains. Users access the Meteo-40 web interface (when online) by entering its subdomain, e.g. https://Dxxxxx.tunnel.ammonit.com

Method \ Action	Configuration	Software Update	Automatic Data Transfer	Manual Data Transfer	Access via Tunnel Server	Required Devices	Recommended Application	Comment
Meteo-40 (Stand-alone)	no • only a few set- tings can be changed	no	no	no	no		Only testing purposes.	
USB memory stick	no	no	no	yes • Download on pre-configured USB memory stick	no	Pre-configured USB memory stick	Backup download.	Manual data download on pre-config- ured USB memory stick.
LAN	yes	yes Internet ac- cess required 	yes • Email • FTP/SCP • AmmonitOR	yes Download via web interface 	yes • Internet access re- quired		Preferred method for con- figuration and software up- date.	The easiest method for initial configu- ration and software updates. A DHCP server in your LAN is recommended.
W-LAN	yes	no	no	yes Download via web interface 	no	USB W-LAN stick	Maintenance on site.	USB W-LAN stick has to be configured in the web interface prior to the usage on site.
Ethernet (point-to-point)	yes	no	no	yes Download via web interface 	no		Backup access.	PC and data logger have to be config- ured.
USB (A/B)	yes	no	no	yes Download via web interface 	no	USB A/B cable and driver file	Backup access.	For Windows™ PCs a driver file is required. It can be downloaded from the Ammonit website.
Modem (GSM / Radio Directional / Satellite)	yes	yes • Internet ac- cess required	yes • Email • FTP/SCP • AmmonitOR	yes Download via web interface 	yes	Modem	Remote access during a measurement campaign.	Thanks to the tunnel server design a standard SIM card can be used in a GSM modem. Tunnel server manages IP ad- dresses. SIM card with static IP address is not necessary.
SCADA over RS485 (Modbus RTU)	no	no	yes • Modbus protocol	yes	no		SCADA	Modbus register map has to be config- ured.
SCADA over Ethernet (Modbus TCP/IP)	no	no	yes • Modbus protocol	yes	no		SCADA	Modbus register map has to be config- ured.





Meteo-40 Data Logger – Communication & Data Transfer

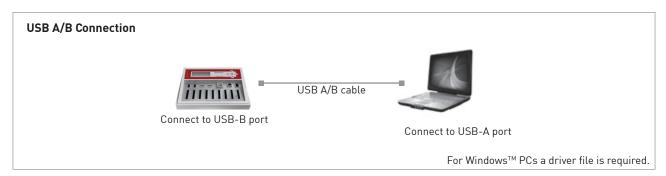
Accessing the web interface of Meteo-40

The Meteo-40 web interface offers all available configuration options and is recommended for the configuration of the data logger. In order to access the web interface, it is necessary to establish a TCP/IP connection between Host PC and Meteo-40. Thanks to the web interface, Meteo-40 can also be operated via Internet with mobile devices, i.e. smartphone, tablet PC.

The easiest way is to connect the data logger to your LAN (Local Area Network). We recommend a DHCP server, which automatically assigns IP network parameters to connected devices, e.g. Meteo-40 data loggers. Usually a DHCP server is part of a LAN. If not, please ask your system administrator to assign a fixed IP address to the data logger (Meteo-40 has to be configured to use a fixed IP address). Another option is to establish a point-to-point connection between your PC and Meteo-40 via USB using a standard USB 2.0 A/B cable.

LAN Connection Company LAN port Company LAN port Ethernet cable Ethernet c

Accessing the web interface for configuration purposes





Meteo-40 Data Logger – Communication & Data Transfer

Accessing the web interface during a measurement campaign or on site

