



Checklist for Data Manager M Communications Setup

Site Internet Access:

- Internet available at the site?
 - ☐ Yes, continue checklist
 - ☐ No, consider a 4G router for internet connection
- Is an ethernet connection located near the Data Manager M, inverters, meters?
 - ☐ Yes, continue checklist
 - ☐ No, consider options for long distance LAN
 - Distance to nearest ethernet port: _____

Requirements for connection to internet/network:

Does the site have an IT manager/restrictive or managed internet access?

- ☐ No, proceed with default network settings on Data Manager M.
- ☐ Yes, continue with checklist or consider a 4G router for internet connection.

Provide IT manager with the information in "Network Requirements for Data Manager M". This contains list of Ports and URL's that must be opened/unblocked.

Information needed for Data Manager M setup:

- Will static IP addresses be assigned through a router with DHCP? This is the most reliable option to ensure the system still works if devices get reset or communications are interrupted.
 - ☐ Yes, provide IT manager with list of MAC addresses for the Data Manager, inverters, meters, etc. Setup Data Manager M with Automatic network settings, or with Manual settings if the IT manager has given you the following:
 - IP address: _____
 - Subnet Mask: _____
 - Gateway IP: _____
 - DNS Server IP: _____
 - ☐ No, data manager M can be setup with Automatic Network settings
- Does the Data Manager M need to connect to internet via a Proxy Server? (new firmware only)
 - ☐ Yes, ask IT manager for Proxy server:
 - Server name: _____
 - Port #: _____
 - Login User/password: _____
 - ☐ No, do not enable proxy server during setup
- The Data Manager M needs access to a time server (NTP). Discuss with IT manager if there is a preferred option:
 - ☐ Use SMA time server. Use default NTP settings, ensure NTP Port & URL open.
 - ☐ Use customer or other time server, setup a manual NTP. Ask IT manager for:
 - Time server IP: _____ or URL: _____

Network requirements (Provide to IT Manager)

1. For the Data Manager to properly function it needs to be able to access the following ports, and therefore they should be unlocked:

Ports (Protocol)	I/O	Description
123 (NTP)	Outgoing	SMA time server. Alternatively, it is possible to use the customer's NTP time server if available.
443 (https)	Outgoing/Incoming	WebUI and ennexOS portal
21 (FTP)	Outgoing	Only needed if customer wants to use FTP to their own website
9524 (SMA spot)	Outgoing	Webconnect 1.5

2. Data Manager M needs to access these URL's:
 - update.sunnyportal.de
 - ntp.sunny-portal.com (alternatively you may specify another NTP server)
 - ldm-devapi.sunnyportal.com
3. The local area network that the Data Manager M, inverters, and meters are connected to needs to support:
 - a. fast Ethernet with a data transfer rate of at least 100 Mbit/s.
 - b. version 2 or version 3 (IGMPv2 or IGMPv3) of the IGMP protocol to allow multicast
 - c. all devices (Data manager M, inverters, meters) need to be in same LAN
 - d. do not use an IGMP Snooping Switch as per RFC 4541

Options for configuring network settings of Data Manager M

Network Settings

Two options:

- Automatic Configuration: an external device with DHCP capability assigns IP addresses to the Data Manager M.
- Manual Configuration: the user can input a fixed IP address, Subnet mask, Gateway IP and DNS server IP address.

Proxy Server

If the customer requires the Data Manager M to communicate via a Proxy server, this can be configured by providing the Server name, Port, and login details (Username, password)

NTP Server

The NTP server is a service for synchronizing times in networks. Either a local NTP server or a public NTP server operated on the Internet can be used. It is possible to specify a specific NTP server from an IP address or URL if the default SMA NTP server is not allowed.