



AVS LINK

Communication adapter for AVS series sensors and AVS MANAGER configuration tool

USER MANUAL

2026

amc VIBRO Sp. z o.o.
2e Pilotow St.,
31-462 Krakow, Poland
T: +48 (12) 362 97 60
S: + 48 (12) 362 97 66
info@amcvibro.com
KRS nr: 0000618618
REGON: 364497010
NIP: 6772403385
www.amcvibro.com

Table of Contents

1. Introduction	3
2. Pinout – M12 5pin Output	3
3. System and Connection Requirements	4
4. First Launch and Device Detection	4
5. Firmware Update Procedure	5
6. Configuration of Operating Parameters	6
7. Diagnostics and Data Reading	7

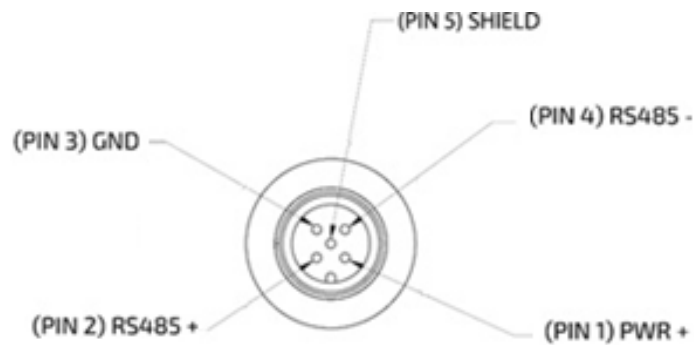
1. Introduction

AVS LINK is a dedicated USB-RS485 communication adapter (interface), serving as an essential diagnostic and configuration link for the AVS 1001HF and AVS 1003LF series miniature vibration and temperature monitoring systems.

The device acts as a signal converter, enabling a direct connection between the sensors and a PC for configuration, parameterization, servicing, and raw signal analysis.



2. Pinout – M12 5pin Output



Pinout

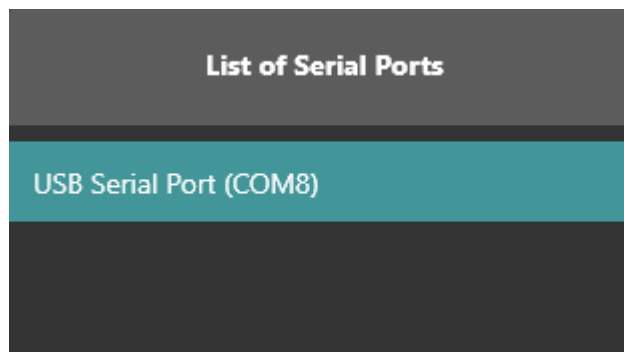
- » 1 – VCC / PWR+
- » 2- RS+ (RS485 bus line A)
- » 3 - GND
- » 4 - RS- (RS485 bus line B)
- » 5 - SHIELD

3. System and Connection Requirements

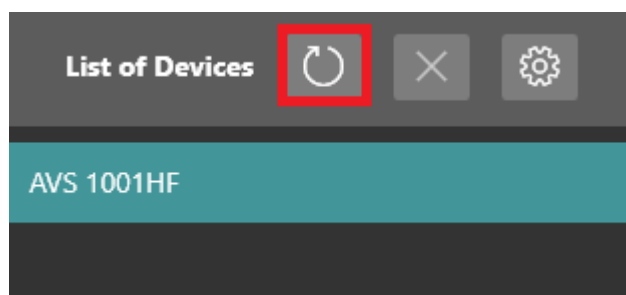
- » **USB Interface:** The AVS LINK adapter must be connected exclusively to USB-A ports on the computer.
- » **Warning:** The device is not compatible with USB-C ports (on the host side).
- » **Connection Sequence:** PC → USB-A to USB-C Cable → AVS LINK Adapter → AVS Module (Sensor).
- » **Software:** The AVS MANAGER application must be installed to operate the device.

4. First Launch and Device Detection

- » After connection, the adapter is visible in the system as a virtual serial port (e.g., USB Serial Port COM8).
- » In the AVS MANAGER program, locate the appropriate COM port number from the list in the top-left corner of the page and confirm it.

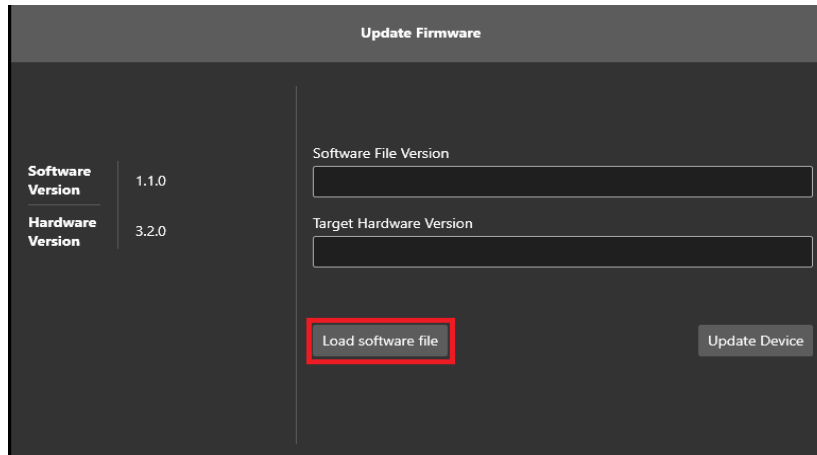


- » Next, click the refresh button below to scan the bus and locate the connected sensor.

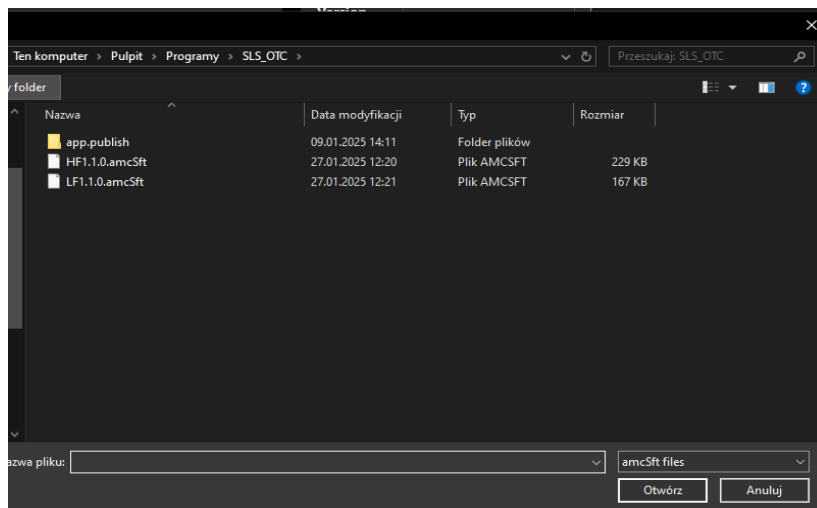


5. Firmware Update Procedure

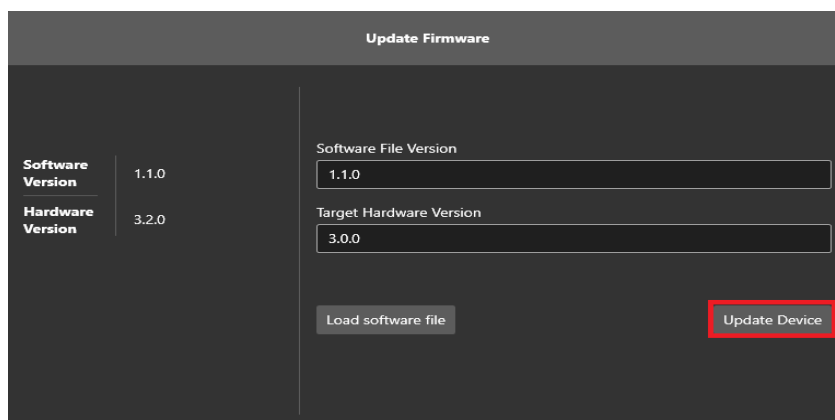
- » Load the appropriate firmware file using the "**Load software**" button.



- » The file is in the **.amcSft** format. Depending on the module type (**HF** or **LF**), you must select the appropriate configuration.



- » Start the update process by clicking the "**Update Device**" button.



6. Configuration of Operating Parameters

- » **Communication Protocol:** Choose between the **Modbus RTU** standard or the dedicated **AV Sensor Protocol** ("Default Communication Protocol").
- » **Name and ID:** Ability to assign a **New Device Name** and a unique **Modbus ID** ("New ID").
- » **Transmission Speed (Baud Rate):**
 - **For Modbus:** Standard at **9600 [Bd]** (adjustable from 4800 [Bd] to 1,500,000 [Bd] according to the register table).
 - **For AV Sensor Protocol:** Set by default to **1,500,000 [Bd]** for raw signal reading (non-adjustable).

Default Communication Protocol

Modbus RTU ▼

Change Protocole Now

Device Type	AVS 1001HF
Device Name	HF_1
UID	47:00:23:00:0D:51:32:30:34:34:35:30
ID/Modbus ID	1

New Device Name

New ID

^
v

AV Sensor Protocol Baud Rate

1 500 000 [Bd] ▼

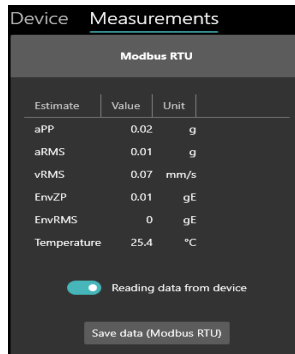
Modbus RTU Baud Rate

9600 [Bd] ▼

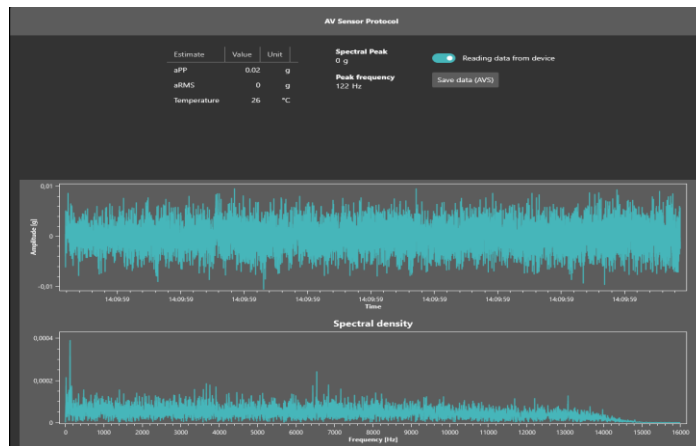
Update Device

7. Diagnostics and Data Reading

- » **Calculated Parameters:** Reading of **accPeak** (in 1 or 3 measurement axes), **accRMS** (in 1 or 3 measurement axes), **velRMS** (in 1 or 3 measurement axes), **EnvelopeZP**, **EnvelopeRMS**, and **temperature** in the "Measurements" tab (Modbus RTU mode). This is available after previously setting **Modbus RTU** as the "Default Communication Protocol".



- » **Raw Signal:** Launching real-time raw signal reading (within the "AV SENSOR PROTOCOL" tab). This is available after previously setting **AV SENSOR PROTOCOL** as the "Default Communication Protocol".



- » **Data Export:** After clicking the "Save data" button, the data is saved to a .csv file in a selected location on your computer.

