

What to expect when changing from EKO MS-80M to MS-80S?

The new MS-80S introduces features that were not available in the former MS-80M Modbus version, also a few changes from the communications settings can be expected when changing from the former M-series model. For our clients who are familiar with the MS-80M, we would like to give you some additional information to get you connected to the MS-80S quickly.

The latest Quick Start Guide, operating Manual and MS-80S software *Hibi*, can be download from the MS-80S product page on the [EKO](#) website.

Output cable wiring

The cable wiring remains the same for the new model, with a wider voltage input range for S-series.

Table 1. Wire Colour Codes MS-80S & MS-80M

No.	Cable Color	S-series	M-series
1.	Brown	5 to 36 VDC	12 to 24 VDC
2.	White	GND	
3.	Blue	RS485/TD[+]	
4.	Black	RS485/RD[-]	
5.	Gray	---	
Shield	Shield	FG	

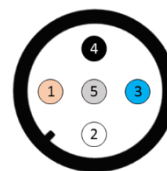


Figure 1. Connector pin number of MS-80S & MS-80M

Default communication settings

For Dataloggers which are programmed to work with MS-80M, the register map and default communication settings has changed on the S-series. The differences in communication settings are shown in Table 2, and differences in the key registers are shown in Table 3. Detailed information about the register map and addresses can be found in the operating manual.

Table 2. Default Modbus communication settings S-series vs M-series

	S-series	M-series
Baud rate	19200	9600
Parity	Even	No parity
Stop bit	1	2
Default Address	The last two digits of serial number, in case of 00 the address is 100	1

Table 3 – Modbus registers address of key parameters S-series vs M-series.

	S-series		M-series	
	Address	Data Type	Address	Data Type
Solar Irradiance [W/m ²]	2,3	FLOAT 32	21,22	FLOAT 32
Thermopile voltage [mV]	50, 51	FLOAT 32	19,20	FLOAT 32
Pt100 temperature [°C]	8,9	FLOAT 32	23,24	FLOAT 32
Internal humidity [RH%]	24, 25	FLOAT 32	Feature not available	
Tilt Angle [°]	80, 81	FLOAT 32	Feature not available	
Serial number	164, 165	UINT32	0 to 7	UINT16
Sensor model	166 to 173	STR	8 to 12	UINT 16
Sensitivity	192, 193	FLOAT 32	16,17	FLOAT 32

Setting changes can be made by connecting your sensor to a computer using the **Hibi software**. It is also possible to work with the former M-series register format with an S-series sensor by changing the register type format. **Please note that EKO sense is not compatible with the S-series.**

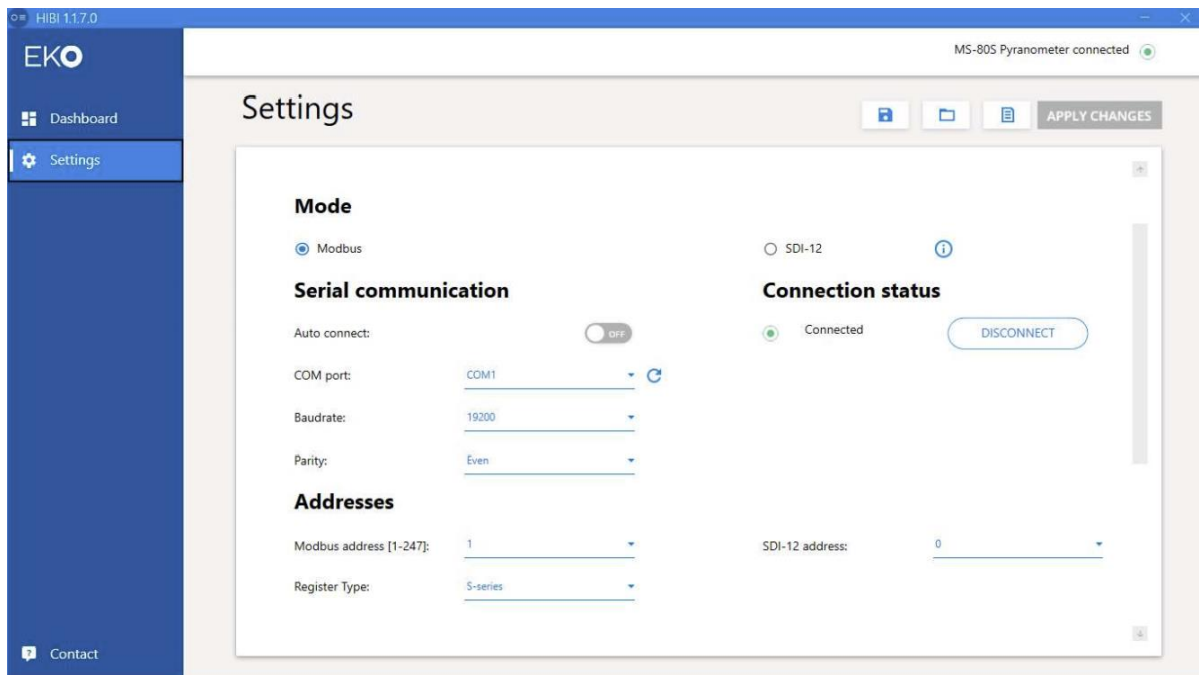


Figure 2. Hibi communication settings screen

Feel free to contact us in case of any questions or support needed at info@eko-eu.com