Selection Table for Digital Silicon Irradiance Sensors
Si-RS485 Series
with Optional External Sensors Tamb-Si, Tmodul-Si and Vwind-Si

All measured parameters are transfered via one Modbus cable (except solution 6).

Solution	Measured Parameters	Sensor Types	Accessories	Notes
1	1. Solar Irradiance 2. Temperature of Sensor Cell[1]	**Si-RS485TC-T-MB**	None	- Temperature of sensor cell
2	1. Solar Irradiance 2. Temperature of Sensor Cell[1] 3. Ambient Temperature	**Si-RS485TC-2T-MB**	None	- Si sensor with firmly connected ambient cable temperature sensor (3 m connection cable) - Optional **Shield Tamb-Si** as a weather and radiation protection
3	1. Solar Irradiance 2. Temperature of Sensor Cell[1] 3. Module Temperature	**Si-RS485TC-T-Tm-MB**	None	- Si sensor with firmly connected module temperature sensor (3 m connection cable)
4	1. Solar Irradiance 2. Temperature of Sensor Cell[1] 3. Ambient Temperature 4. Wind Speed	**Si-RS485TC-2T-v-MB**	**Tamb-Si**[2] **Vwind-Si**[3]	- Si sensor with waterproof connectors for **one** temperature sensor and one wind speed sensor - External sensors with preconfigurated plugs - Optional **Shield Tamb-Si** as a weather and radiation protection
5	1. Solar Irradiance 2. Temperature of Sensor Cell[1] 3. Module Temperature 4. Wind Speed	**Si-RS485TC-2T-v-MB**	**Tmodul-Si**[2] **Vwind-Si**[3]	- Si sensor with waterproof connectors for one temperature sensor and one wind speed sensor - External sensors with preconfigurated plugs
6	1. Solar Irradiance 2. Temperature of Sensor Cell[1] 3. Module Temperature 4. Wind Speed 5. Ambient Temperature	**Si-RS485TC-2T-v-MB** **Ta-ext-RS485-MB**[4]	**Tmodul-Si**[2] **Vwind-Si**[3]	- Si sensor with waterproof connectors for one temperature sensor and one wind speed sensor - External sensors with preconfigurated plugs - Optional **Shield Tamb-Si** as a weather and radiation protection
7	1. Solar Irradiance 2. Temperature of Sensor Cell[1] 3. Two external Temperatures	**Si-RS485TC-3T-MB**	**Tmodul-Si**[2] **Tamb-Si**[2]	- Si sensor with two waterproof connectors for two temperature sensor (for example Tmodul-Si and Tamb-Si) - External sensors with preconfigurated plugs

[1] The temperature of the sensor cell can be used as a rough estimation of the PV module temperature. A quantification of the difference between of the measurement of the temperature of the sensor and the possible PV module temperature is not possible.

[2] The temperature sensors Tamb-Si and Tmodul-Si have a 3 m connection cable.

[3] The wind speed sensor Vwind-Si has a 5 m connection cable.

[4] The ambient temperature sensor Ta-ext-RS485-MB is a separate Modbus sensor with its own Modbus cable.

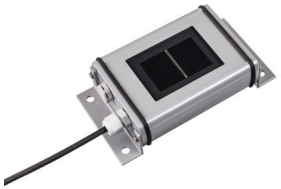
Ingenieurbüro Mencke & Tegtmeyer GmbH • Schwarzer Weg 43A • 31789 Hameln • Germany
Tel. +49-5151-403699-0 • Fax: +49-5151-403699-19 • www.ib-mut.de • info@ib-mut.de

Date: May 2022

Selection Table for Digital Silicon Irradiance Sensors Si-RS485 Series

with Optional External Sensors Tamb-Si, Tmodul-Si and Vwind-Si

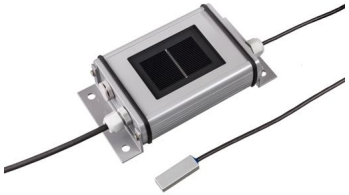
Solution	Sensor Types
1	Si-RS485TC-T-MB



Solution	Sensor Types
2	Si-RS485TC-2T-MB



Solution	Sensor Types
3	Si-RS485TC-T-Tm-MB



Solution	Sensor Types
4	Si-RS485TC-2T-v-MB + Tamb-Si + Vwind-Si



Solution	Sensor Types and Accessories
5	Si-RS485TC-2T-v-MB + Tmodul-Si + Vwind-Si



Solution	Sensor Types and Accessories	
6	Si-RS485TC-2T-v-MB + Tmodul-Si + Vwind-Si	Ta-ext-RS485-MB





Solution	Sensor Types and Accessories
7	Si-RS485TC-3T-MB



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