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

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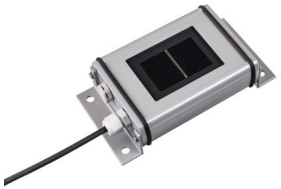
# Selection Table for Digital Silicon Irradiance Sensors Si-RS485 Series

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

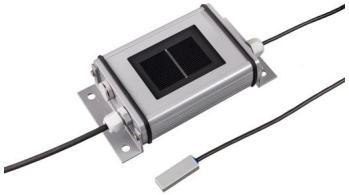
| Solution | Sensor Types |
|---|---|
| 1 | Si-RS485TC-T-MB |



| 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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