

Main Changes STM100 – STM110/110C

EnOcean has developed the STM110 module which will replace the STM100 module. The product will be available in volume begin of May 2007.

In the following table the main differences between the modules are shown. For details please refer to the STM110 User Manual which is available from EnOcean on request.



Main Changes STM100 => STM110

Feature	STM 110	STM 100
Solarcell	35x13x1.1 mm, please note new soldering instructions STM100 solar cell also working	28x13x2.3 mm
Operation at low illumination levels	improved, operation down to 50 lux with new solar cell	-
Digital inputs	4 "real" digital inputs with 100kOhm impedance	1 "real" digital input, 3 digital inputs via resistor network and A/D converter
Telegram timing	3 packets within <40ms	3 packets within <70ms
Triggered telegram transmission	Every manual "WAKE" leads to telegram transmission	Manual "WAKE" only leads to telegram transmission in case of significant change of value
Minimum time between manual "WAKE"	>7ms	>70ms
Serial interface	configuration of AD thresholds, manufacturer code (manufacturer ID, device type)	not available
Teach in telegram	special teach in telegram with manufacturer code if programmed into module	not available
External output V_OUT	regulated 3.0V +/- 3%, >2 ms, 1mA max.	unregulated 2.7V - V_SC1, >2ms, I(V_OUT)+I(V_REF)=1mA max.
Reference voltage V_REF	2.048V +/- 3%, >2ms, 1mA max.	2.048V +/- 1%, >2ms, I(V_OUT)+I(V_REF)=1mA max.
LED output	regulated 3.0V +/- 3%, 3x1.2 ms, 2mA max.	unregulated 2.7V - V_SC1, 3x1.2ms, 2mA max.
RF compliance	fully compliant to specification	compliance in limited temperature and voltage ranges, pls. refer to STM100 Errata Sheet
Power supply range V_SC1	2.2 - 5.0 V	2.7 V - 4.0 V
Thresholds AD0 / AD2 / AD2	default 6LSB / 5LSB / 14LSB, configurable via serial interface	6LSB / 5LSB / 14LSB

STM110/110C - packaging



The packaging is modified with respect to STM100 due to the new solar cell. Please find below pictures of the new packaging. The solar cells are placed in the bottom layer below the STM100 modules.

