

Canique Smartmeter Sense Datasheet

document revision 1.0

This datasheet applies to Canique Smartmeter Sense, hardware revisions: 1.4.x

Power consumption

All specifications are provided for an ambient temperature of 25°C unless noted otherwise. The given figures only apply to normal operation mode, that is, after 15 minutes have passed since the device has been supplied with power.

The *Message Await Current* does not include the current drawn from an attached IR probe.

Battery Voltage	Sleep Current	Message Await Current
1,5 V	1,76 μ A	9,32 μ A
1,25 V	2,11 μ A	10,74 μ A
1,0 V	2,66 μ A	14,01 μ A

Specs

Required battery:	1x AA size
Reverse Polarity Protection:	Available if battery holder is used
Minimum battery voltage to startup:	1 V
Minimum battery voltage to operate:	0,8 V
Max. supported battery voltage:	1,8 V
Temperature range (except for battery):	-40°C to 85°C
Min./Max. transmission power:	-18 dBm / +13 dBm
Transmission speed:	25 kbps
PCB size:	84 x 25 mm
Drill hole size for screws:	M2

Screw terminal (for Infrared probe)

Max. supported cable length	2 meters (400pF)
Communication protocol	UART 300 - 57600 bps
Supported Smartmeter Message Formats	ISKRAEMECO AM550 SIEMENS IM350 Landis+Gyr E450
Supported Infrared probes	Any IR to UART converter that can run with 1,8V supply voltage
Number of wires	4 (VCC, GND, RX, TX)

Supported wire diameter: AWG 26-18
Recommended wire isolation: stripped 4-5 mm
Pitch: 2,54 mm
Screws on connector: M1,6

Pin Status on screw terminal

Pin	During Sleep or Radio TX/RX	During Message Await
VCC	0V	1,8V
UART RX	Floating	Input, No-Pull
UART TX	Floating	Pull-Up (1,8V)