

Specification	Embion EMS Controller <i>EEC-A010</i>
Device management	
Max. Number of Manageable devices	40
Communication interfaces	
LAN	1x 10/100/1000Mbps 1x 10/100Mbps
RS485	3x Max. 4Mbps (Galvanic isolation to DC supply)
P1 (smart meter)	1x (Galvanic isolation to DC supply)
Digital Input	2 Isolated inputs (5-32V)
Digital Output	2 Potential-free contacts
WiFi	Yes
Bluetooth	Yes (future implementation)
USB	2x USB2.0 type A 1x USB-C on front
User interface	
Display	Graphical display (128x64 pixels, monochrome)
Buttons	4 For display interaction
LED	2x RGB On front 1x RGB On base (defined status LED)
WEB	Yes, via the Embion EMS HUB portal
Security	
Transport Layer Security	V1.3
Device	Trusted Platform Module V2.0
Local Storage Encryption	Yes
HUB Server Location	Europe
Security / feature software updates	OTA, USB
Supported protocols	
Ethernet	Modbus TCP, custom
RS485	Modbus RTU, custom
P1	P1 protocol (DSMR 4.0 – DSMR 5.0)
Electrical	
DC Power Supply	12V - 32V
Power Consumption	5W Typical, 20W Max.
Environment	
Operating Temperature Range	-10°C ~ 50°C
Storage Temperature	-20°C ~ 70°C
Relative Humidity (non-condensing)	10% ~ 90%
Max. Operating Altitude	2500 m
Mechanical	
Dimensions (W x H x D)	106,2 x 90,0 x 58,0
Weight	330 gram
Protection Degree	IP20
Installation options	Wall mounting, DIN rail mounting