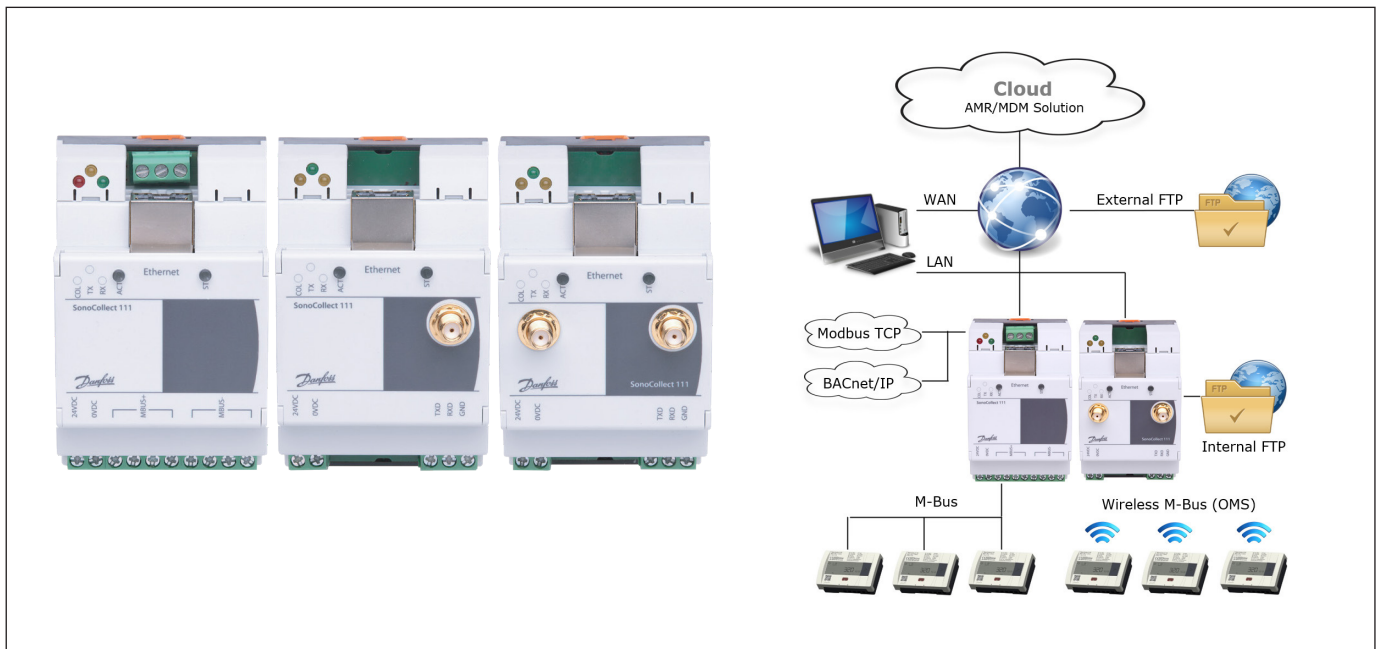


Fact Sheet

SonoCollect 111™

Data Concentrator for Smart Metering



SonoCollect 111 is a product family that addresses huge meter installations. The performance of the M-Bus interface and the CPU is very high.

Complete functionality

SonoCollect 111 supports up to 500 Unit Loads at the wired M-Bus interface directly.

Furthermore the Wireless M-Bus is offering a new technology compliant to the OMS. Therefore you can use SonoCollect 111™ in all present and prospective infrastructures to capture consumption data.

The wireless version integrates up to two independent receivers. This enables parallel operation of different OMS modes, like S mode and T mode or the use of different frequency bands at the same time.

If a hybrid readout infrastructure is needed, an RS-232 interface can be connected to an external level converter for wired communication.

Connection to management systems

SonoCollect 111 supports XML and SML. Through this features, it is prepared for the connection with SonoEnergy™ or other back-end system to facilitate remote meter reading or energy data management. Updates and configurations can be done remotely by the server system. An easy way of maintenance is assured. SonoCollect 111 offers all essential attributes for intelligent Smart Metering.

Participation of the customer

A client website of the utility supplier offers the customer the possibility of up-to-date information about the consumption at any time. Thanks to an integrated web server, SonoCollect 111 provides an additional offline front-end. The customer can directly access the consumption data without internet access. A simple internet browser can be used to connect to SonoCollect 111. The easy to use website presents the consumption data and some statistics of all connected meters.

The integrated web server offers complete configuration. Some features are automated bus scan, easy selection of data points and generation of CSV or XML files, FTP server and FTP client, secured communication and an extensive management of user access rights.

M-Bus is short circuit protected (self-resetting fuse).

RS-232 interface for connecting an external level converter for the M-Bus.

Consumption and sensor data is transmitted to SonoEnergy™ or other energy management systems directly as CSV or XML file.

SonoCollect 111 is a consolidated device which fulfills all duties and responsibilities of Smart Metering. Real Plug'n'Play saves time and effort.

Ordering

Model	Number of meters	M-Bus	wM-Bus (OMS)	Ethernet	Modbus TCP	BACnet/IP	Code no.
SonoCollect 111 E-M-125	125	X		X	X		014U1602
SonoCollect 111 E-M-250	250	X		X	X		014U1604
SonoCollect 111 E-M-500	500	X		X	X		014U1606
SonoCollect 111 E-WM-500	500		X	X	X		014U1607
SonoCollect 111 E-WM-2-500	500		X (2 channels)	X	X		014U1608
SonoCollect 111 EB-M-125	125	X		X	X	X	014U1613
SonoCollect 111 EB-M-250	250	X		X	X	X	014U1614
SonoCollect 111 EB-M-500	500	X		X	X	X	014U1615
SonoCollect 111 EB-WM-500	500		X	X	X	X	014U1616
SonoCollect 111 EB-WM-2-500	500		X (2 channels)	X	X	X	014U1617

Technical specifications

SonoCollect 111 E-M

SonoCollect 111 E-WM

Power supply	12-36 VDC, max. 1500 mA (depending on bus load)	12-36 VDC, max. 100 mA;
Dimensions	54 x 90 x 60 (W x H x T) in mm;	54 x 90 x 60 (W x H x T) in mm, without antenna connectors;
Installation	3 modules width DIN rail, 35 mm;	3 modules width DIN rail, 35 mm;

Technical specifications, Metering

SonoCollect 111 E-M

SonoCollect 111 E-WM

OMS compliant Interface	-	AES encryption
Wireless M-Bus Interface	-	Auto-scan, Mode: S, T, C wM-Bus (868 MHz) or (868 / 433 MHz);
M-Bus Interface	M-Bus according to EN 13757-2, screw clamps;	wM-Bus according to EN 13757-4 and OMS, SMA female socket for external antenna;
Conformity to SML	Yes	Yes
Serial interface	-	RS-232, screw clamps;
Overall max. number of meters	max. 5000 (logically)	max. 5000 (logically)

Technical specifications, General

Protection class	IP 20
Weight	150 g
Wiring cables	2.5 mm ² solid/stranded wire or 1.5 mm ² stranded wire with ferrules
Temperature range	0 - 50° C
Humidity	10 - 95% relatively, no condensation
Integrated web server	Yes
Data logger storage	4 GB
Firmware update	Yes, directly or via WAN (Internet)
Configuration via WAN (Internet)	Yes, complete remote control via WAN

Technical specifications, Communication

Ethernet interface	100 MBit, RJ45, support of IPv6 and IPsec (VPN)
WAN connection to server system (push)	TCP/HTTP connection (XML), optionally extensible
Encryption WAN (server communication)	SSL (server- and client-side certification), OpenVPN
E-Mail transmission (push)	XML data, CSV data optional
FTP transfer (push, pull)	CSV data
Plug'n'Play	Prepared for SonoEnergy™ - Smart Metering
Fallback-Routing (alternative connection in case of an incident)	Yes, indication of further servers and communication paths

Danfoss A/S

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