

AmsEuridis

Data Sheet

Description

The AmsEuridis module is a client interface module in the Amplex Module System. It is designed for two-way communication with Euridis compatible utility meters.

The AmsEuridis module can easily be connected with up to ten utility meters. The AmsEuridis module collects readings and other data from the meters and subsequently transfers these data to an AmsCPU module that acts as a data concentrator and WAN module. The AmsCPU module delivers the data to the central server when required. Direct communication and power supply between the AmsEuridis module and the AmsCPU module are handled by an incorporated A-Bus interface, which is based on the industrially proven RS-485 technology.

Functionality

Topic	Comments
A-Bus communication	A-Bus two-way communication with A-Bus masters, e.g. AmsCPU, AmsPLC+, AmsService.
Euridis communication	According to IEC 62056-31 The software of the AmsEuridis module is only compatible with Actaris ACE 5000 electricity meters.
Autodiscovery	The module is automatically discovered by the AmsCPU. In case a module is disconnected from the AmsCPU, this is reported to the server application and the module is listed as missing. If the module is reconnected to the AmsCPU or another AmsCPU, it will be rediscovered by the system.
Real-time clock	The real-time clock is automatically synchronized with the AmsCPU, which in turn is synchronized with the Network Time Protocol (NTP).
LED	AMS Status LED (green): indicates whether the A-Bus is up and running.

Connections

I/O	Comments
A-Bus	A-Bus client module
Euridis	Euridis+ and Euridis- connect to one meter or a collection of meters. The AmsEuridis module can be connected to a maximum of 10 meters. The meters are polarization independent. Data transfer rate 1200 bps

Reliability & Maintainability

Topic	Comments
Software upgrade	The software on the AmsEuridis module can be updated remotely from the central server.
Installation of new software	New software is transferred without interrupting the normal functionality of the AmsEuridis module. When the software has been transferred, the integrity of the software is checked and the software is installed.
Self-test	A built-in self-test (BIST) is performed after power-up.
Watchdog and brown-out reset	Watchdog and brown-out reset ensure that the system is up and running at all times.

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Technical Specifications

Operational specifications

Storage temp.	-40°C to +85°C
Operating temp.	-20°C to +65°C
Max humidity	90% (non-condensing)
IP grade	IP20
Input voltage	12 V DC via A-Bus
Current consumption	Typical 115 mA, Max 140 mA

Standards and approvals

2006/95/EC, Low Voltage Directive (LVD)
2004/108/EC, EMC Directive
2002/95/EC, RoHS Directive



AmsEuridis

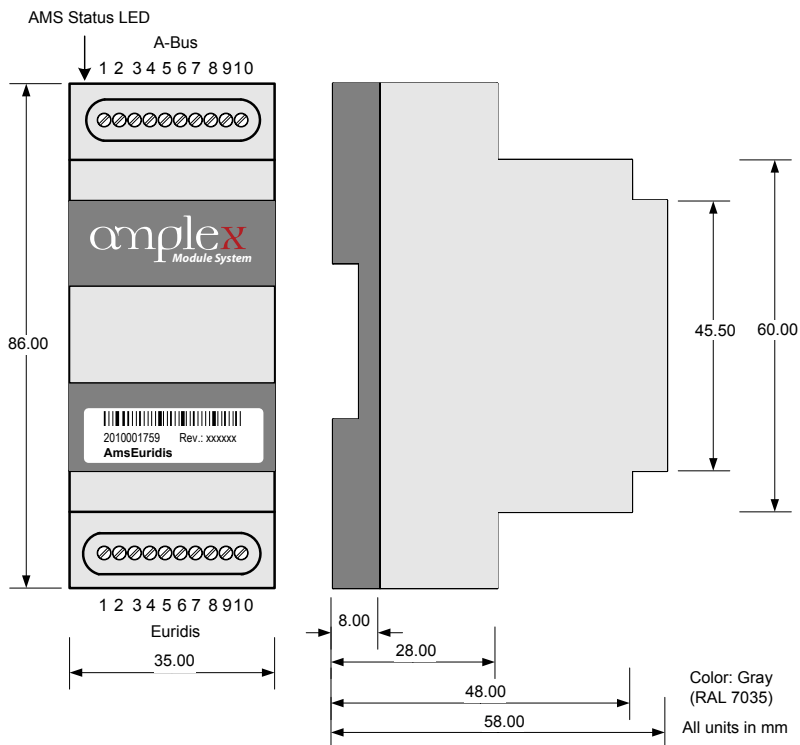
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Installation Guide

The AmsEuridis module can be connected to any master module in the Amplex Module System, e.g. AmsCPU, AmsPLC+ and AmsService. The A-Bus connections are internally daisy-chained for easy installation.

Topic	Comments
A-Bus cable	Use shielded twisted pair cable.
A-Bus cable length	< 3 m
Euridis cable	Use twisted pair cable.
Euridis cable length	< 3 m
0.5 mm ² terminals	Use a 2 mm slotted screwdriver to loosen/tighten the terminal screws.
Enclosure	The AmsEuridis module must be installed in an enclosure of protection degree IP65 or installed at a location that provides the module with the same level of protection.

Drawing



Ordering Information

Product	Order number
AmsEuridis	100-30-007

All specifications are subject to changes

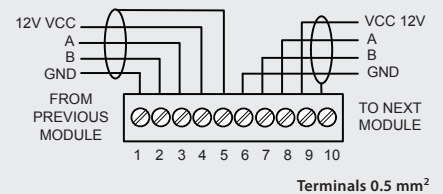
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Physical Specifications

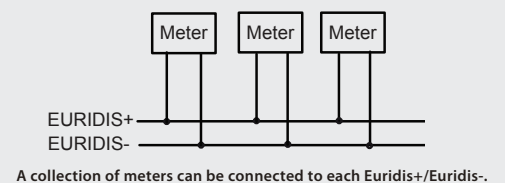
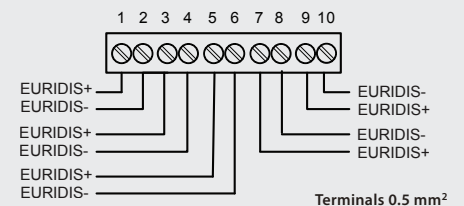
Weight	57 g
Top part	Gray (RAL 7035) Lexan 940
Base part	Black (RAL 7021) Noryl VO 1550
Coating	Conformal coated
A-Bus connector	0.14 - 0.5 mm ² (AWG 26-20)
Euridis connector	0.14 - 0.5 mm ² (AWG 26-20)
Mounting	DIN-rail (EN50022)

I/O Schematic

A-Bus connection



Euridis connection



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