

Industrial Electronic Devices

User Manual Power Supply specific for M-Bus instruments

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User Manual

Revision 1.100 English

Stabilized Power Supply specific for M-Bus instruments

(Order Code: APW020, APW040, APW080; APW160; APW250)

for Price information:

www.adfweb.com?Price=APW020 www.adfweb.com?Price=APW040 www.adfweb.com?Price=APW080 www.adfweb.com?Price=APW160 www.adfweb.com?Price=APW250

Benefits and Main Features:

- ⊖ Low cost
- 😌 Rail din mountable
- Industrial temperature range: -40°C / 85°C (-40°F / 185°F)



User Manual

M-Bus devices for which the APWxxx is designed:

Converter M-Bus to

www.adfweb.com?Product=HD67021 www.adfweb.com?Product=HD67022 www.adfweb.com?Product=HD67024 www.adfweb.com?Product=HD67030 (RS232) (RS485) (USB) (Ethernet)

Gateway M-Bus from/to Modbus on

www.adfweb.com?Product=HD67029M-232 www.adfweb.com?Product=HD67029M-485 www.adfweb.com?Product=HD67044M www.adfweb.com?Product=HD67051-B2 www.adfweb.com?Product=HD67053M www.adfweb.com?Product=HD67058M www.adfweb.com?Product=HD67063-yyy-B2-xxx (Modbus on RS232) (Modbus on RS485) (Modbus TCP) (CANopen) (PROFIBUS) (DeviceNet) (DeviceNet)

Analyzer & Scanner M-Bus www.adfweb.com?Product=HD67031

Extender and Repeater, M-Bus www.adfweb.com?Product=HD67032

Concentrator M-Bus

www.adfweb.com?Product=HD67054M www.adfweb.com?Product=HD67057-B2-xxx (Serial) (Ethernet)

Do you need to choose a device? do you want help? Ask it to the following link: <u>www.adfweb.com?Cmd=helpme</u>



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UPDATED DOCUMENTATION:

Dear customer, we thank you for your attention and we remind you that you need to check that the following document is:

- Updated
- ✤ Related to the product you own

To obtain the most recently updated document, note the "document code" that appears at the top right-hand corner of each page of this document.

With this "Document Code" go to web page <u>www.adfweb.com/download/</u> and search for the corresponding code on the page. Click on the proper "Document Code" and download the updates.

REVISION LIST:

Revision	Date	Author	Chapter	Description
1.000	14/09/2011	FI	All	First release version
1.001	04/04/2013	Nt	All	Added new chapters
1.100	30/06/2014	Ff	All	New hardware version

WARNING:

ADFweb.com reserves the right to change information in this manual about our product without warning.

ADFweb.com is not responsible for any error this manual may contain.

TRADEMARKS:

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SECURITY ALERT:

GENERAL INFORMATION

To ensure safe operation, the device must be operated according to the instructions in the manual. When using the device, legal and safety regulation are required for each individual application. The same applies also when using accessories.

INTENDED USE

Machines and systems must be designed so the faulty conditions do not lead to a dangerous situation for the operator (i.e. independent limit switches, mechanical interlocks, etc.).

QUALIFIED PERSONNEL

The device can be used only by qualified personnel, strictly in accordance with the specifications.

Qualified personnel are persons who are familiar with the installation, assembly, commissioning and operation of this equipment and who have appropriate qualifications for their job.

RESIDUAL RISKS

The device is state-of-the-art and is safe. The instruments can represent a potential hazard if they are inappropriately installed and operated by untrained personnel. These instructions refer to residual risks with the following symbol:

This symbol indicates that non-observance of the safety instructions is a danger for people that could lead to serious injury or death and / or the possibility of damage.

CE CONFORMITY

The declaration is made by our company. You can send an email to <u>support@adfweb.com</u> or give us a call if you need it.



CONNECTION SCHEME:

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Connector1: Power Supply Input 110/220 VAC 0V +V 24 VDC --www.ADFweb.com APW020 Stabilized Power Supply C.S.:B189 Date Code: 27,14 110/240V AC to 24V DC Q.n. ----DANGER! OHS High Voltage 110/240 VAC Fuse Connector2: Power Supply Output Led1: 0V = Ground +V = Positive wire Green Output Voltage 24 VDC





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CHARACTERISTICS:

Power suppliers specifics for M-Bus Master products that have to power up to 20, 40, 80, 160 and 250 Standard Slave M-Bus.

TECHNICAL SPECIFICATIONS:

- Input voltage range: 85...265 VAC or 120...375 VDC;
- Mains frequency: 50/60Hz
- Output voltage: 24VDC;
- Input current limitation: 100mA with fuse
- Power Output: Depends on the order code (see table below);
- Mechanical fixing: 35mm DIN Rail mounting;
- Dimensions DxWxH: 33x53x90mm
- Overcurrent Input Protection;
- Overtension Input Protection;
- Undertension Input Protection;
- Overtemperature Protection.

Device Code	Power Output
APW020	4
APW040	6
APW080	9
APW160	18
APW250	36W



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MECHANICAL DIMENSIONS:



Weight: 200g (Approx)

Figure 2: Mechanical dimensions scheme for APWxxx

ORDER CODE:

Order Code:**APW020**-Order Code:**APW040**-Order Code:**APW080**-Order Code:**APW160**-Order Code:**APW250**-

- Power Supply for M-Bus Master device that supports up to 20 Slaves
- Power Supply for M-Bus Master device that supports up to 40 Slaves
- Power Supply for M-Bus Master device that supports up to 80 Slaves
- Power Supply for M-Bus Master device that supports up to 160 Slaves
- Power Supply for M-Bus Master device that supports up to 250 Slaves



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DISCLAIMER:

All technical content within this document can be modified without notice. The content of the document is a under continual renewal. For losses due to fire, earthquake, third party access or other accidents, or intentional or accidental abuse, misuse, or use under abnormal conditions repairs are charged to the user. ADFweb.com S.r.I. will not be liable for accidental loss of use or inability to use this product, such as loss of business income. ADFweb.com S.r.I. shall not be liable for consequences of improper use.

OTHER REGULATIONS AND STANDARDS:

WEEE INFORMATION

Disposal of old electrical and electronic equipment (as in the European Union and other European countries with separate collection systems).

This symbol on the product or on its packaging indicates that this product may not be treated as household rubbish. Instead, it should be taken to an applicable collection point for the recycling of electrical and electronic equipment. If the product is disposed correctly, you will help prevent potential negative environmental factors and impact of human health, which could otherwise be caused by inappropriate disposal. The recycling of materials will help to conserve natural resources. For more information about recycling this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

RESTRICTION OF HAZARDOUS SUBSTANCES DIRECTIVE

The device respects the 2002/95/EC Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (commonly referred to as Restriction of Hazardous Substances Directive or RoHS).

CE MARKING

T C The product conforms with the essential requirements of the applicable EC directives.



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WARRANTIES AND TECHNICAL SUPPORT:

For fast and easy technical support for your ADFweb.com SRL products, consult our internet support at <u>www.adfweb.com</u>. Otherwise contact us at the address support@adfweb.com

RETURN POLICY:

If while using your product you have any problem and you wish to exchange or repair it, please do the following:

- Obtain a Product Return Number (PRN) from our internet support at <u>www.adfweb.com</u>. Together with the request, you need to provide detailed information about the problem.
- Send the product to the address provided with the PRN, having prepaid the shipping costs (shipment costs billed to us will not be accepted).

If the product is within the warranty of twelve months, it will be repaired or exchanged and returned within three weeks. If the product is no longer under warranty, you will receive a repair estimate.

