User Manual

IPTV EPG Server

Model	Item no.
IPTV EPG Server Ver. 1.0	492095

Language	EN	Version	891095B

triax.com

Attention! / Achtung! / Consignes de sécurité!

UK   Failure to comply with the specified precautionary measures may cause serious injury to persons or damage to property. The installation and commissioning may only be performed by suitably qualified persons, technicians or installers in compliance with safety regulations.

Damage due to improper installation and commissioning, defective connectors on cables or any other incorrect handling will void the warranty.

CAUTION: The safety requirements are according to EN 60728-11 and must be observed.

- Disconnect mains power before working on electrical systems.
- Any additional electrical wiring requirements should always be installed by a suitably qualified person(s).
- Installation or service work should NEVER be undertaken during electrical / thunderstorms.

DE   Gewährleistung

Die gesetzliche Gewährleistung nach Paragraph 437 BGB beträgt 24 Monate.

Bei unsachgemäßer Installation und Handhabung erlischt jeglicher Garantieanspruch.

Bestimmungsgemäße

Und sachwidrige Verwendung

Die Montage und Inbetriebnahme darf nur von eingewiesenen Personen, Technikern

oder Installateuren unter Beachtung der Sicherheitsbestimmungen durchgeführt werden.

- Schaden durch falsche Montage und Inbetriebnahme sowie durch unsachgemaße Handhabung fuhren zum Erlöschen des Garantieanspruchs.

FR   Veillez à bien respecter les consignes de sécurité ci-dessous. Leur non-respect peut provoquer des dommages matériels ou corporels.

L'installation et la mise en route ne peuvent être effectués que par des techniciens ou des installateurs qualifiés en respectant les consignes de sécurité.

La garantie ne sera pas appliquée lors de dégâts causés par une erreur de montage, de mise en route ou par un mauvais raccordement ou toute autre manipulation incorrecte.

PRUDENCE : avant toute intervention, votre installation doit être conforme aux exigences définies par les dispositions Européennes EN 50083 (conformité des installations collectives) et EN 60065 (normes en vigueur pour la protection électrique).

- Débranchez l'appareil avant toute intervention, car certains composants sous tension sont dangereux (risque d'électrocution).
- Toute intervention sur l'installation ou travaux de maintenance sont à proscrire en cas d'orage.

Content

Introduction

The IPTV EPG Server provides Middleware Solutions, for Hotel IPTV systems, with an eXtensive Markup Language (XML) file with the EPG data, normally contained in a DVB Transport Stream Barker Channel from satellite, cable and terrestrial antenna input to the TDX.
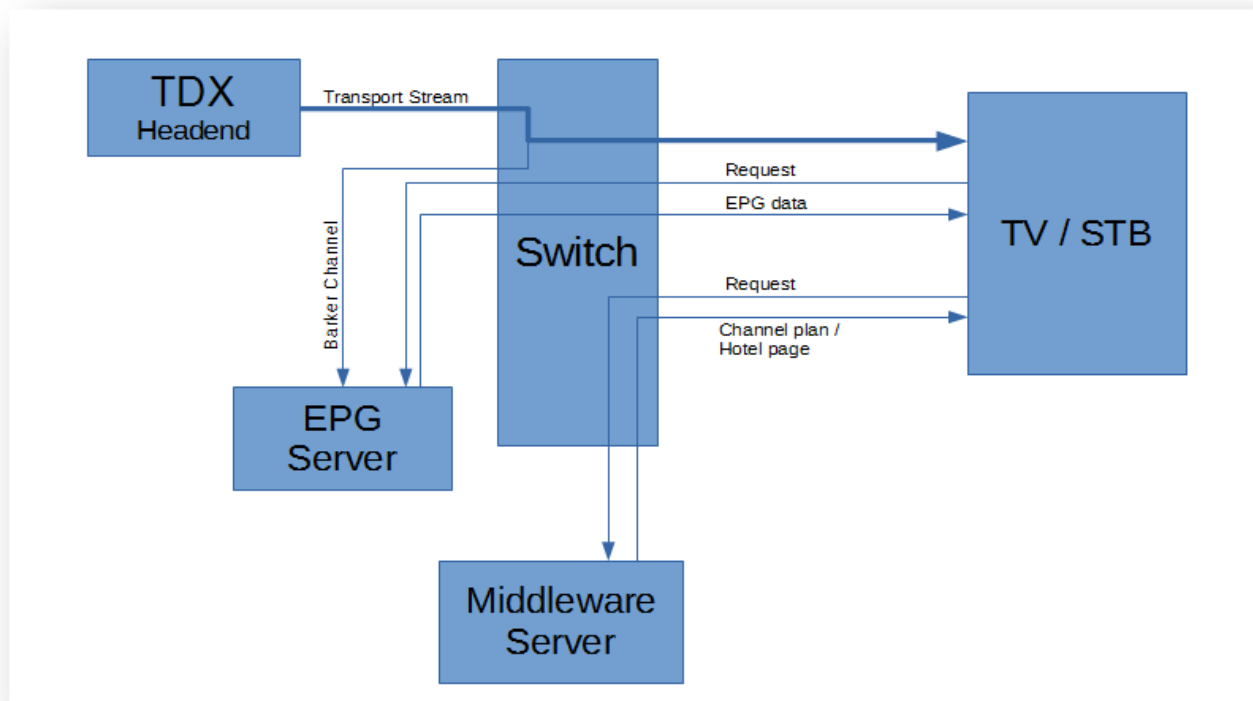
Example setup, based on Macnetix system

Setup

Before getting started, make sure the headend is setup with a unique TSID and ONID and each channel has a unique SID.

Setup the headend to deliver an IP Barker channel (a transport stream containing only information about upcoming programs, thereby reducing the bandwidth required for the transport streams carrying the audio/video information) in order to provide the IPTV EPG Server with a transport stream of EPG data.

TDX Setup

For information on how to set up an IP Barker channel, please refer to the "IP Output Configurations – EIT Barker channel" chapter of the TDX Headend System Main Unit User manual.

Take special note of the multicast IP address for the Barker channel, as this is needed for the rest of the setup procedure.

Connecting to the EPG Server

Connect IPTV EPG Server to power. Using a computer on the same local network, type in the Server IP (default: **http://192.168.0.200**) into a browser to access the EPG Server Web Interface. Enter user name and password (default "**admin**" and "**Triax1234**") and press **Enter**.

NB! The computer must have access to the same IP Subnet as the Server.

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EPG Server Web UI

STATUS | SETTINGS | SECURITY | DATABASE | SOFTWARE UPGRADE | MISC

SYSTEM STATUS

Server log

Click here to view the server log. This will open in a new window.

View log

System

Version	1.1.3
Up Time	16 days 3 hours 14 minutes 7 seconds
Cpu Usage	0%
Memory Usage	11.99 MB
S/N	555888777
MAC Address	c4:be:84:cb:17:74

Database

Memory Usage	1.191 MB
Services	27
Events	6563
Buffer Size, Current	0 kB
Buffer Size, Peak	458 kB
Buffer Size, Max	10.0 MB

The Server Status page, gives basic information about the server. Take special note of the "Services" and "Events" fields. These show how many services the server is currently receiving data for, through the Barker channel. This number may differ from the number of services, reported by the TDX, since not all services actually have EPG data in their transport stream. The Events show how many programs are currently registered in the EPG server

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Device Settings

The Settings link takes you to the settings menu.

The Settings menu contains the static IP settings for the IPTV EPG Server and the Server Settings for listening to the Barker channel.

The IPTV EPG Server IP can be changed to a different subnet (e.g. the same as the TDX Service port). You can do so by changing it under "IP Settings". It is **not** a necessary for the IPTV EPG Server to be on the same subnet as the TDX AUX port, they simply need to be connected to the same switch.

Server Settings

Enter the Barker channel IP you entered when setting up the TDX here.

You should now be able to access the EPG data in the selected XML format from your middleware solution.

TIP: To check the setup, you could enter the server address, followed by the path to see the raw xml file, e.g. http://192.168.0.200/xmlTvEvents.

Special note on Samsung SINC Server: Samsung Language Priority is a setting used for the Samsung SINC server system. Because the Samsung format is only designed for 1 language, the server will use the topmost language in this list that is available in the Barker stream. If the server has detected a new language that has not been prioritized yet, it will be printed in red until the changes are applied.

To update the IPTV EPG Server, click select file and in the dialog box, select the image file you received from Triax A/S. Select Open and return to the Software Upgrade page. The click the Upgrade button and wait for the IPTV EPG Server to restart.

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Security

In this menu you can change the password for the EPG Server as well as the time that must pass for an auto logoff, if wanted. Default session timeout is infinite, but if the page is accessed from another PC, the password needs to be entered again.

Software Update

The IPTV EPG Server can be updated via the Ethernet port. This is done by going to the Software Upgrade page.

To update the IPTV EPG Server, click select file and in the dialog box, select the image file you received from Triax A/S. Select Open and return to the Software Upgrade page. The click the Upgrade button and wait for the IPTV EPG Server to restart
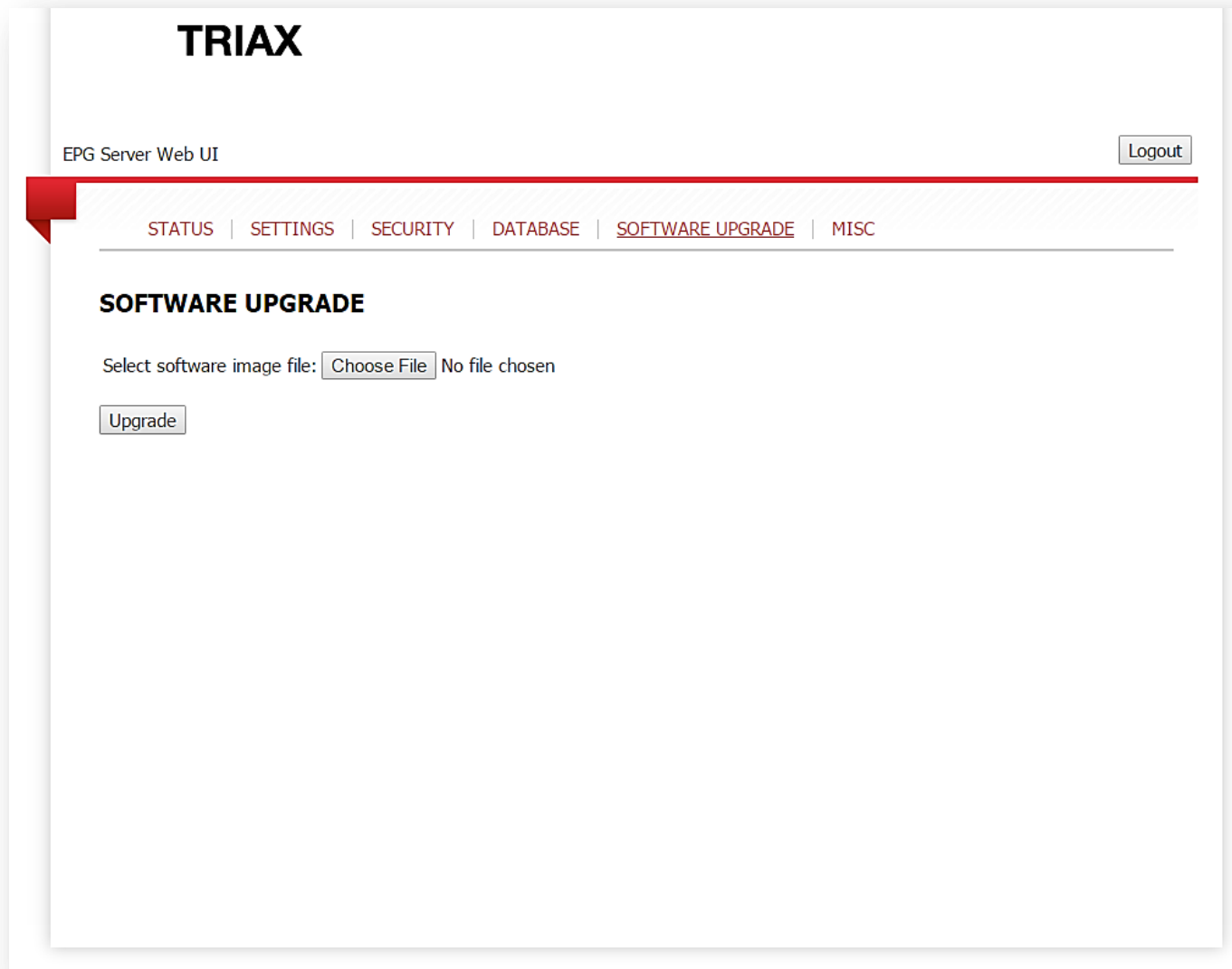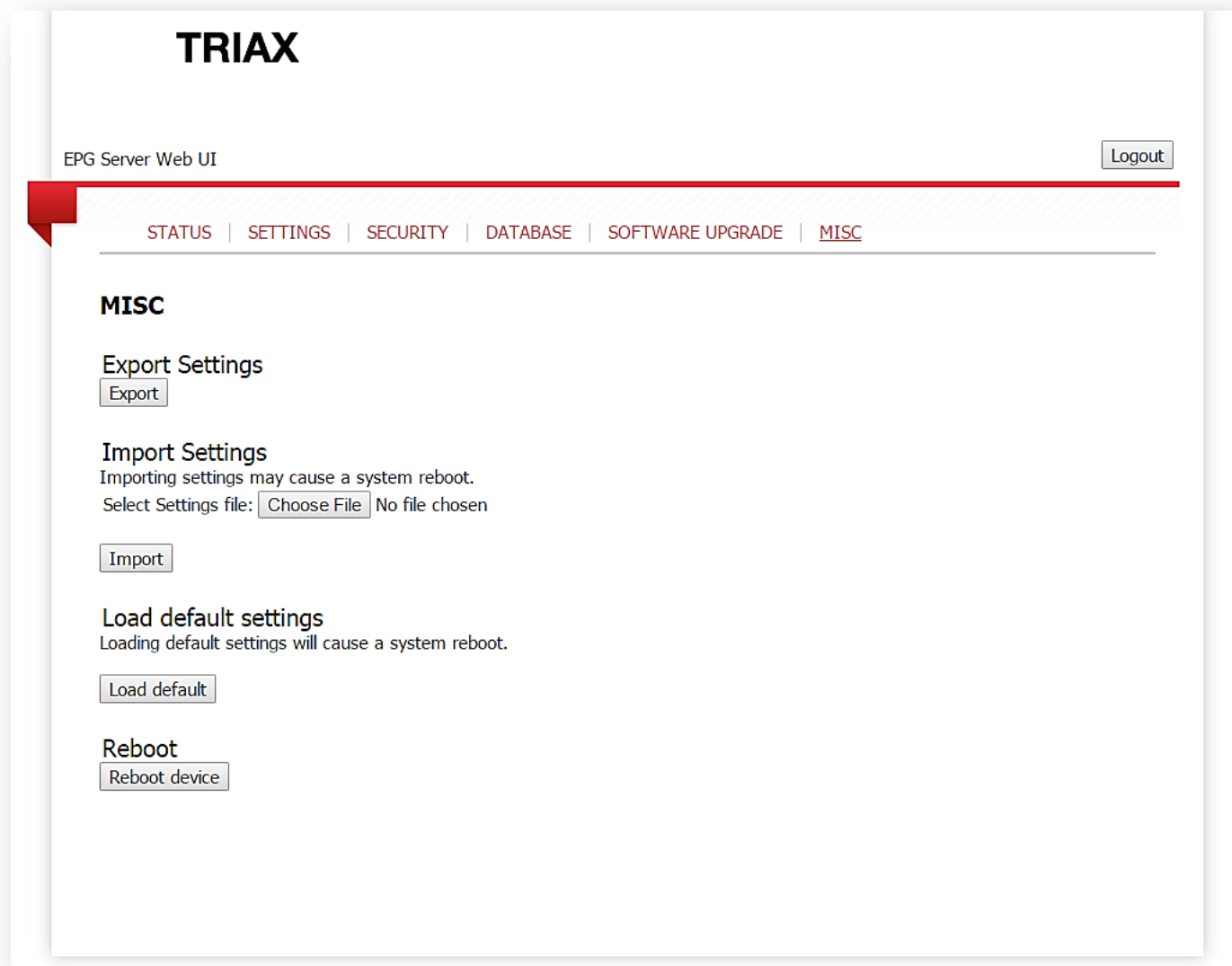
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EPG Server Web UI   [Logout]

STATUS | SETTINGS | SECURITY | DATABASE | SOFTWARE UPGRADE | MISC

MISC

Export Settings
[Export]

Import Settings
Importing settings may cause a system reboot.
Select Settings file: [Choose File] No file chosen

[Import]

Load default settings
Loading default settings will cause a system reboot.

[Load default]

Reboot
[Reboot device]

Importing and exporting settings

When setting up multiple identical systems, you can use the Misc page to export the settings from one IPTV EPG server to another. Simply click Export and save the file on a FAT32 formatted flash drive and plug it into the next Server. You can then use the dialog box to load the setting.
On this page you can also Load the Default settings and Reboot the device.

Output format

The function of the IPTV EPG Server is to translate the data provided by the TDX via the Barker channel to the supported XML file formats. The Barker channel itself does not contain the service names, but provides EPG data for each ONID/TSID/SID, i.e. the Original Network ID (ONID), the Transport Stream ID (TSID) and the Service ID (SID). In the IPTV EPG Server, this combination of ONID/TSID/SID is organized into a "DVB Triplet", showing each ID as 3 sets of 4 hexadecimal numbers.

Example:

ONID	TSID	SID	DVB Triplet
43962	0	1	abba00000001

So in order for the TV/STB to display the correct information for the corresponding service, the XML file triplets has to be paired with the Service names in the Service plan.

XMLTVFormat

The Triax preferred format is the open XMLTVFormat. This format provides a well-defined structure for the EPG data that can be used in a variety of devices. It should be noted, however, that the TDX, and thus also the EPG Server is providing the data in UTC time rather than local time, and the application reading the XMLTVFormat must therefore correct for the local timezone and DST before presenting it to the user.

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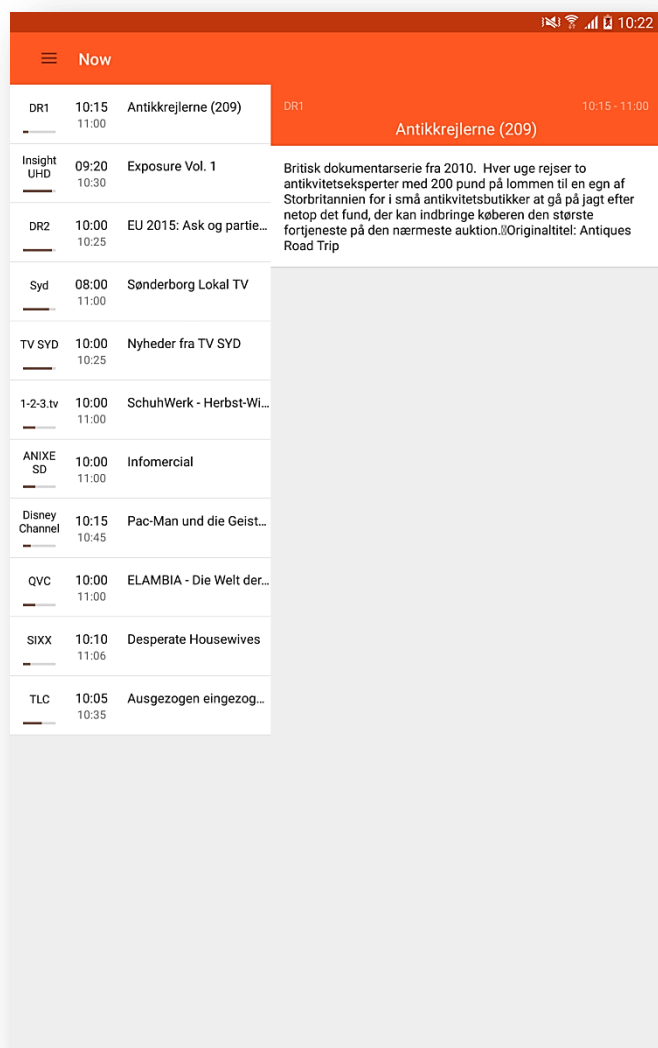
This picture demonstrates how the XMLTVFormat may be presented after a timezone correction and after the DVB Triplets have been translated into the actual service names.

Information necessary for the Middleware Server

The IPTV EPG Server is designed to provide EPG data to an IPTV Hospitality TV or Set Top Box. In these setups, the Middleware Server controls the channel mapping for the for the TVs, and the only channel information the IPTV EPG Server can extract from the Barker stream, is the Original Network ID (ONID), the Transport Stream ID (TSID) and the Service ID (SID). All this means that the Middleware Server must request the EPG data from the IPTV EPG server, using the ONID, TSID and SID.

To view this information on a TRIAX TDX, go to the TDX Service tool and select "Services". Make sure the "IP" and "IP SID" boxes are checked. This will show you the SID for all the services that are currently mapped to IP addresses.

On the TRIAX TDX, the IP ONID is always 43962 and the IP TSID is always 0.

Samsung SINC Server

When setting up the SINC server channel plan, first make sure the provided tray application is running. Then you can select the relevant EPG data as long as you know the SID. Note that the SIDs are delivered in HEX numbers from the IPTV EPG Server. This means that the number 10 is represented as an A, the number 11 is represented as a B and the number 15 is represented as an F. Like the Macnetix Middleware server, the SINC server has a special XML format and additionally requires a special tray application, running on the server, in order to copy the information to the required location on the server.

An alternative and sometimes easier way to set up the channel plan is to edit the Excel formatted channel plan that can be exported from the SINC server and add the values from the channel list that can be exported from the TDX. When this is done, the channel list can be imported into the SINC server again. *NB! The SINC server only supports service names of 15 characters or less (including spaces).*

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Troubleshooting

If you are unable to access the EPG data in the proper format, please check if the Status page has registered any Services and Events. If this is not the case, check the IP settings of both the IPTV EPG Server and the Headend.

Type		IPTV EPG Server Ver. 1.0
Art. no		**492095**
Functionality		EPG XML Server for IPTV
I/O RJ45 Ethernet Connector		
Supported speed	Mbps	10/100/1000
Cable Category		Cat 5e, Cat 6, Cat 7
Maximum Cable Length	m	100
Input USB AUX		
Maximum power consumption	mA	500
Maximum supported disk size	TB	2
Maximum supported file size	GB	4
Maximum supported filename length		255 characters
General Data		
I/O connector IP Stream		RJ45 Ethernet
Input connector USB AUX		USB female
Input connector DC		DC Jack 2mm inner diameter, 5.5mm outer diameter
Current consumption (without USB Device present)	mA	400 @5V
Input voltage (fed from TOU 232SA or optional from PSU	V	4.8...5.2
Operating temperature	°C	-10...+50
Weight	kg	1.126
Dimensions	mm	160x167x30
Accessories		
Power supply		100...240VAC, +5VDC/3A, TRIAX Part no.: 310019

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For further information
and updated manuals go to

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