

# TDX Cabinet Main Unit for TDX Range of Modules

Part # GK-TDXCABINET



The TDX housing is designed to accommodate up to 16 input frontend and 6 output quad backend modules. Up to three TDX headends can be combined as one system of up to 48 input muxes and 72 output channels, either 72 PAL programs or 72 QAM/COFDM muxes or a mixture of these. The heart of the TDX is the TDX pool where services are available from all front end modules, whether terrestrial, satellite or AV encoder. From the pool, the services can be cherry-picked and distributed via the COFDM, QAM, PAL or IP backend modules. Any input can be connected to any output. Configuration of the TDX can either take place by using the TDX service tool or the web based configurator. Both the TDX service tool and the web configurator ensure that the COFDM or QAM muxes are created in a way where the maximum bandwidth is respected. The TDX unit can be mounted in a 19" rack or mounted on the wall horizontally or vertically by using the wall brackets. Use the key to open the front lid and get access to the modules (keys are identical for all TDX systems). After opening the lid, the top metal

cover can be removed. The compartment under the cover serves as a cable guide, ensuring the connected cables are protected, orderly and easy to access at the headend. Both frontend and backend modules are replaceable from the front side of the TDX without powering down the headend. The main PSU is also replaceable from the front side by disconnecting the mains power and using a torx screw driver. A fully loaded headend consumes only 280W. Coupled with intelligent cooling with four integral fans, this increases the life time of the equipment and makes the TDX a choice that takes care of the environment.

#### KEY FEATURES:

- Better and stronger performance with energy-friendly and long-term reliability, in a compact housing
- Quick installation
- Cable management
- Hot swap service in TDX system.
- Easy set-up with few modules

# TDX Cabinet

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RF			
Frequency range (tv out)	MHz	47-862	
Impedance (RF out):	Ohm	75	
Return loss (RF out):	dB	> 14 at 47 MHz (-1.5 dB/octave; min. 10 dB)	
Testpoint	dB	-20	
Output level max @ 60 dB IMD 24 combined PAL channels	dBμV	103	
Power Supply			
Operating voltage	VAC	190-260 50/60 Hz	
Power consumption, max	W	280	
Max. LNB control	mA	4 x 305	
Connectors:			
AC Power in (1.8 m)		IEC320 (cable)	
Ext. TV-OUT		F-connector	
Ext. Testpoint		F-connector	
PC		RJ 45	
SFP cage		4 x expansion	
Environment			
Temperature, operating	°C	-10...+50	
Temperature, storage	°C	-20...+70	
Humidity, operating	%	20...80	
Humidity, storage	%	10...90	
Mechanical data			
Dimensions product (L x W x H)	mm	440 x 240 x 290	
Dimensions carton (L x W x H)	mm	546 x 316 x 374	
Weight - net	kg	10.5	
Weight - gross	kg	12.1	

# TDX Solutions

## **IPTV as a distribution technology**

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In closed buildings, there is a growing requirement for distribution of TV signals over CATx cables. This requires a headend to receive the signals and transform them into IP services and also a middleware to administrate the IP receivers. In addition the used network structure must be designed to the requirements for IPTV transmission. This relates specifically to the used routers and switches which must support layer 3 and IGMP standards.

### Features

Only one type of cabling in the building necessary.

With the use of a transcoder server it is possible to support different end-user devices.

WIFI transfer to the end-user device.

## **TDX as part of a fibre distribution**

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Increasingly, the existing optical CATV fibre networks (maybe in the past distributing analog modulated TV signals) are more and more used to transmit IP TV Services between the central headend and sub headend. Also the distribution cells in new system architectures are planned smaller. One reason for this is the feed-in of Internet services and providing bandwidth for Internet services to the end customer. These distribution cells can be built up as an RF distribution network or as an optical distribution network. There are different technologies for building up the system in terms of optical distribution. FTTC (Fibre to the curb), the optical distribution ends at the street cabinet. FTTB (Fibre to the block), the fibre reaches the boundary of the building. FTTH (Fibre to the Home), the fibre reaches the living room.

### Features

Easy signal handling and management

Smaller RF-distribution cells

Independent RF distribution per cell possible

Redundancy systems with lower investments possible

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