

# EFX-14

Four port **G.fast** ONU / DPU  
for Fast and Successful FTTB and  
FTTdp Deployment over Existing  
In-House Copper Installation



## Aggregate data rates up to 1 Gbps!

The **EFX-14** system is a Plug & Play solution distributing ultra-speed data inside multi-dwelling houses.

In many cases, operators have installed 1G Ethernet optical fiber pipes in front of the house but still can't deliver premium Triple Play services to customers because of in-house fiber installation problems. In multi-dwelling houses, residents often can't agree on the in-house installation work and related expenses, which in turn entirely blocks all deployment.

The **EFX-14** solution overcomes this issue **by using the existing in-house copper pair installations** instead of carrying out the fiber and thus completely eliminates the need to enter customer's home.

**EFX-14** is a very compact four port DPU (ONU) with full MSAN functionality. One optical fiber can be used to feed four (4) subscribers with G.fast connection. Each G.fast connection can deliver up to **1 Gbps aggregate speed!**

Different housing options allow installation in different places. The ultra-compact size with passive cooling is very suitable for installations in existing distribution cabinets, basements, and hallways (front door scenario). Optional special IP-68 housing allows installations in manholes.

**EFX-14** has different powering options. It can be powered locally, remotely from CO over existing (dark) copper or even from subscriber's side (reverse powering over G.fast). All these features make **EFX-14** a very flexible solution for applications in different **FTTdp**, **FTTB** and **FTTH** scenarios where a simple, economical and future proof solution is required for providing **premium Triple Play services**.

- > Plug & Play FTTdp/FTTB deployment
- > Front door scenario

- > Full MSAN functionality

- > Extra compact housing for installation in dp boxes

# MAIN FEATURES & SPECIFICATIONS

## Network Standards

- > 10/100/1000BASE-T.....IEEE802.3, 802.3u, 802.3ab, 802.3x, 802.3ac
- > 1000BASE X.....IEEE802.3z, (2500BASE-X-optional)
- > Energy efficient Ethernet..IEEE 802.3az
- > PoE.....IEEE 802.3af, IEEE 802.3at
- > QoS&VLAN.....IEEE 802.1p, 802.1q, 802.1ad

## Protocol:

- > Transparent to higher layer protocols

## G.fast compliant standards with:

- > ITU-T G.9700/1, supports 106a profile
- > ITU-T G.999.1,G.997.1
- > IEEE 1588
- > G.9941, G.hs
- > Spectrally co-existent with legacy technologies (ADSL, VDSL)

## FEATURES:

- > Aggregate data rate up to 1 Gbps with DTA option (Dynamic Timing Allocation)
- > Selectable „Band plan“ allows allocation of throughput
- > Diagnostics of DSL link function
- > Line SNR select
- > Line Interleave protect
- > Band Plan profile selectable

## Bridging and VLAN

- > Filtering functions for MAC/IP/Port.
- > QoS for Port/VLAN/DSCP/TCP-UDP Port number.
- > Port Based VLAN & IEEE 802.1q VLAN Tagging, IEEE 802.1ad QinQ, 802.1 QoS
- > Port configuration for Bandwidth/Duplex/Speed/Flow control/Broadcast storm

## Connectors:

- > Interchangeable SFP module:  
Ethernet: 10/100/1000 Base T (RJ45) or Optical gigabit Ethernet (SFP-LC, single/multi-mode, single/dual fiber) or GPON ONU solution compliant with ITU-T G.984 standard
- > 10/100/1000 Base T, PoE, RJ-45
- > Local powering (48V/0,3A )

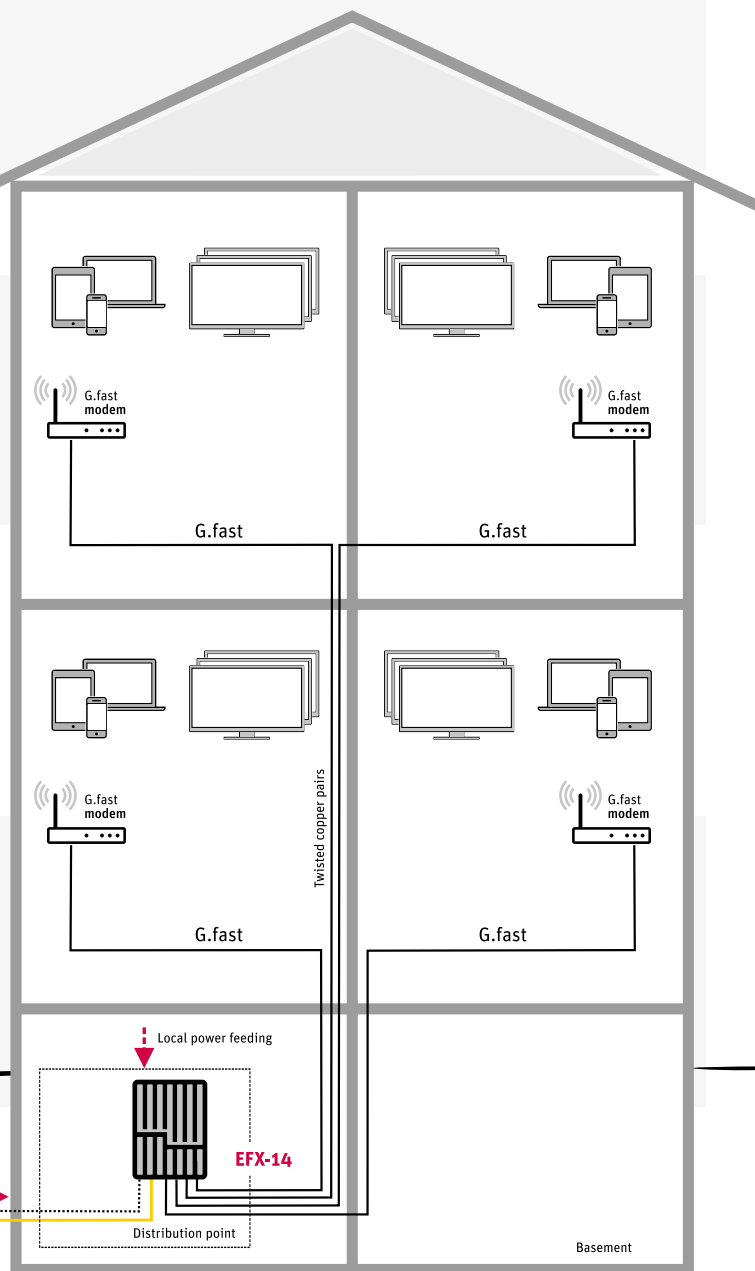
## Indicators

- > Power LED
- > LAN x/Optical Link/Act LED
- > Line Link/Act LED

## Power Requirement-Options:

- > Local powering (48V/0,3A or 100-240VAC via adaptor)
- > PoE acc. to IEEE802.3af
- > Reverse powering compliant with ETSI TR 102 629 and ETSI EN 302 099
- > Remote powering through spare copper pair (ILoop < 55 mA, symmetry guarded)

Optional remote power feeding over legacy copper  
OPTICAL FIBRE 1X



FTTB example

## Emissions Compliance

- > FCC part 15 Class B, CE Mark

## On-board surge protection

## Housing:

- > Dimensions: (WxLxD) = 109 x 169 x 56 mm
- > Metal with passive cooling

## Environment Conditions

- > Operating Temperature: -20C ~ +70C

MVM TEL d.o.o. reserves the right to make changes to specifications without prior notice.

