# EVX-01

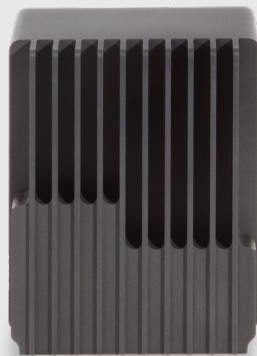## Single-Channel **VDSL2 ONU**
for Fast and Successful FTTB and FTTdp Deployment over Existing In-House Copper Installation

## Aggregate data rates up to 300 Mbps!

The **EVX-01** system is a Plug & Play solution distributing ultra-speed data inside single- and 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 **EVX-01** solution overcomes this issue by "unbundling" the installation case. This makes it possible to address each customer individually.

Instead of carrying out new installations, the existing telephone cable is used. The **EVX-01** solution uses a single copper pair to transmit ultra-high-speed data and to power equipment all at the same time. Each customer powers his associated ONU **EVX-01** unit, which is installed in the basement or at a distribution point (dp), from his mains via the **RPM-01** unit. Each fiber is connected to an individual **EVX-01** ONU, and the latest VDSL2 technology is used to transmit 200 Mbps (total BW 300 Mbps) up to the customer. Any standard VDSL2 modem can then deliver premium Triple Play services.

> Plug & Play FTTB/FTTdp deployment

> Power feeding problem solved

> Individual approach — Pay as You Grow

> Extra compact housing for installation in dp boxes

## 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

## VDSL2 compliant standards with:
> ITU-T G.993.2, all Profiles up to 30a
> ITU-T G.993.2 Amd.5, annex-P
> Broadband-Forum TR-114
> G.HS
> G.INP (G.998.4) Retransmission
> G.998.4 Amd.2 extended memory for enhanced rates

## FEATURES:
> Within a distance of 300 meters maximum speed of 200/100 Mbps even with G.INP enabled (retransmission)
> Selectable "Band Plan" allows allocation of throughput
> Diagnosis 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, IEE 802.1ad QinQ, 802.1 QoS
> Port configuration for Bandwidth/Duplex/Speed/Flow control/ Broadcast storm
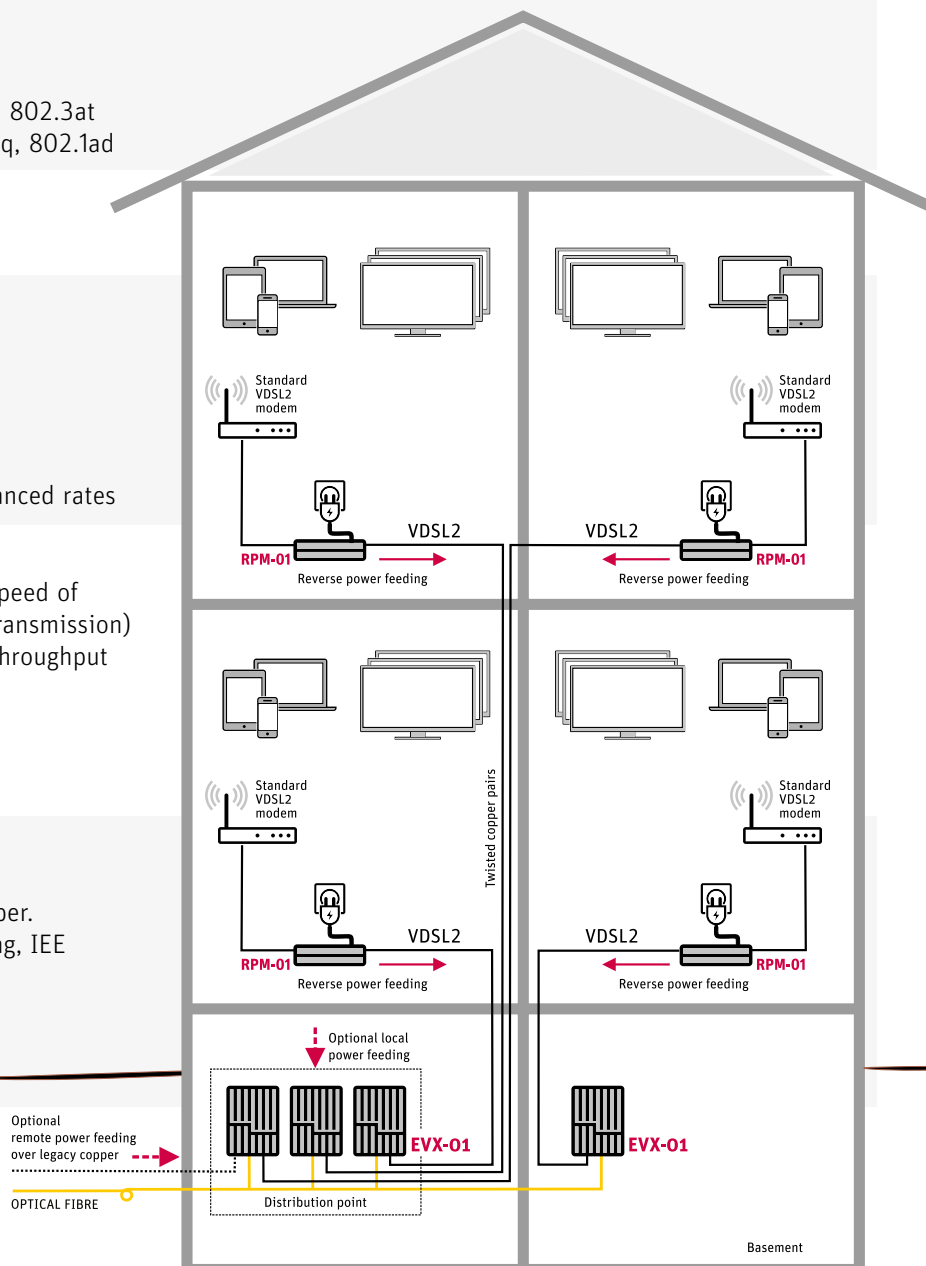
## Connectors:
> Interchangeable SFP module:
  Ethernet: 10/100/1000 Base T (RJ45) or Optical gigabit Ethernet (SFP-LC, single/ multi-mode, single/dual fiber) or GPON ONU solution compliant with ITU-T G.984 standard
> 10/100/1000 Base T, PoE, RJ-45
> Local powering (48V/0,3A )

## 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)

## Emissions Compliance
> FCC part 15 Class B, CE Mark

## On-board surge protection

## Housing:
> Dimensions: (WxLxD) = 4,6 x 11,5 x 8,7 cm
> Metal with passive cooling and lock possibility
> DIN rail stacking

## Environment Conditions
> Operating Temperature: -20C ~ +70ºC

Standard VDSL2 modem

VDSL2
RPM-01
Reverse power feeding

Standard VDSL2 modem

VDSL2
RPM-01
Reverse power feeding

Twisted copper pairs

Standard VDSL2 modem

VDSL2
RPM-01
Reverse power feeding

Standard VDSL2 modem

VDSL2
RPM-01
Reverse power feeding

Optional local power feeding

Optional remote power feeding over legacy copper

EVX-O1
EVX-O1

OPTICAL FIBRE

Distribution point

Basement

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