

## PON OEO Repeater EPON Amplifier

Model: **BD-2EPON-RE**



### Overview:

BAUDCOM's EPON OEO equipment is an optical transmission equipment which magnify and reshape signals during optical transmission process. It can effectively save OLT quantity and lengthen network transmission distance. The OEO fiber repeater equipment have been widely applied for long-distance transmission in various optical communication applications. Its advantages include in small size of optical signals, being economical and safe, and simple installation etc. Therefore, it can be applied in various optical transmission fields.

### Features:

- In accord with IEEE802.3ah and Chinese communication industrial standard (YD/T 1475-2006);
- Extend PON system transmission distance from 20km to 60km;
- Uplink: supports combination of different types of PON OLT interfaces and different physical connectors;
- Downlink: supports different types of PON ONU;
- Be compatible with EPON system;
- Be compatible with EPON OLT and ONU equipment manufactured by different vendors;
- 1U desktop equipment, small space occupation and low power consumption;
- Supporting EPON OEO relay function
- 3R signal regeneration
- Supporting 1550nm and 1620nm dual wavelength storage with externally connected passive equipment

### EPON OEO transmission performance

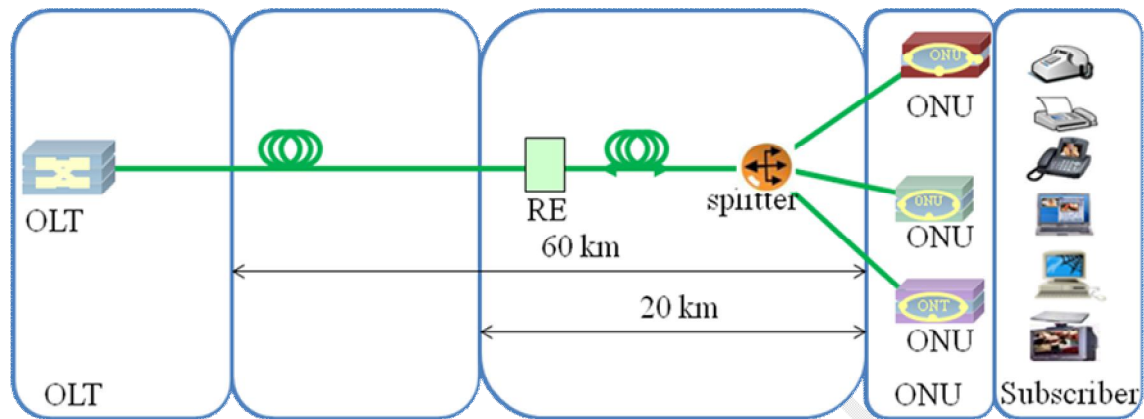
Uplink: supporting receipt and transmission of 2.488G/s or 1.25G/s continuous signals.

Downlink: supporting receipt and transmission of 1.25G/s burst-mode signals.

Supporting 60km/1:64 ODN network expansion

Where, OLT--->OEO BOX trunk supports 40km transmission;

OEO BOX--->ONU supports 20km/1:64 ODN power budget. Refer to the below figure for details:



Applying SFP optical interface module, connected as shown in the above figure.

In EPON system, it will not generate any error code to the system and have no adverse effects on transmission or performance.

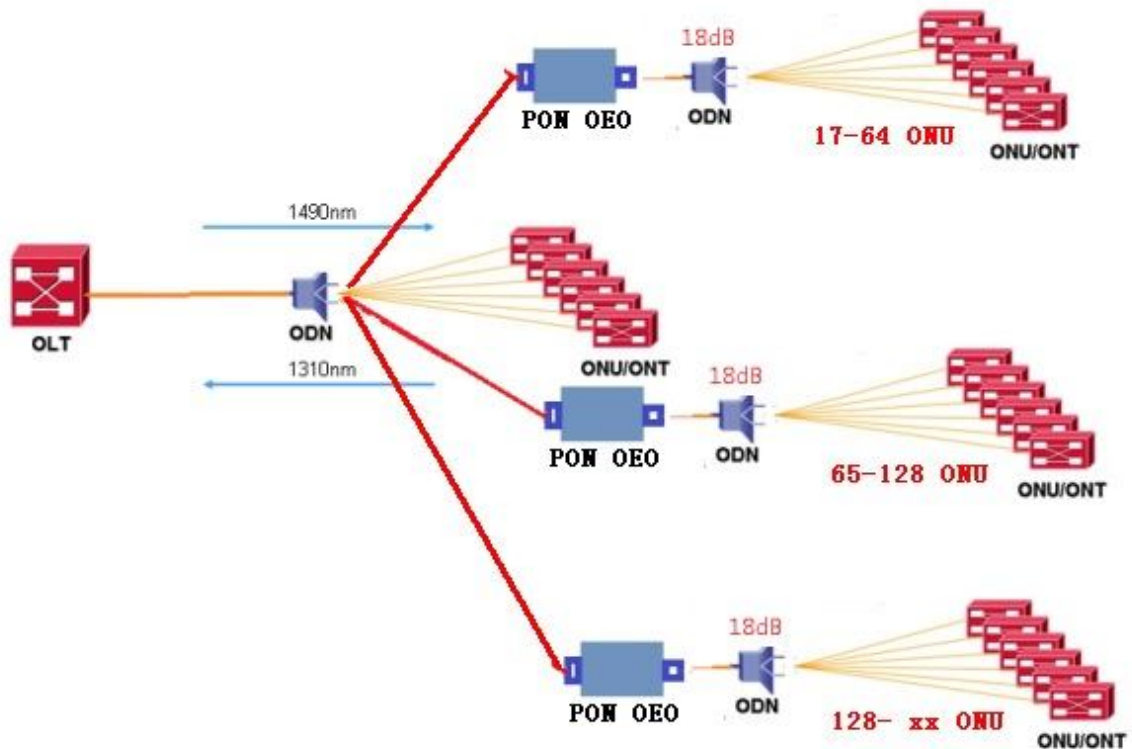
### Specification:

No.	Item	Value
1	Dimension	210mm x 133mm x 43mm (length x width x height)
2	Rated current	0.35A
3	Rated voltage	-48 VDC
4	Working temperature	-5°C~45°C
5	Working humidity	5%~95%
6	Output optical power of OLT	≥3Bm
7	Optical power of ONU	≥ 0.5dBm
8	Receiving sensitivity of OLT	≤-28dBm
9	Receiving sensitivity of ONU	≤-28dBm
10	Burst-mode signal time	≤ 50ns
11	-Fast AGC attenuation	≥ 10dB

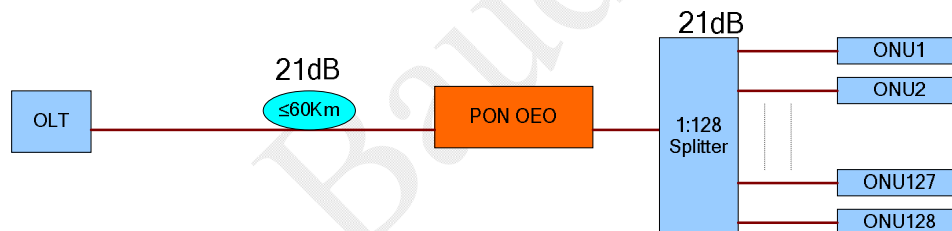
### Compatibility

- 1) Be compatible with EPON system;
- 2) Be compatible with EPON OLT and ONU equipment manufactured by different vendors;
- 3) Be capable of adapting to 1550nm analog video and 1620nm OTDR dual wavelength storage

## Typical Application

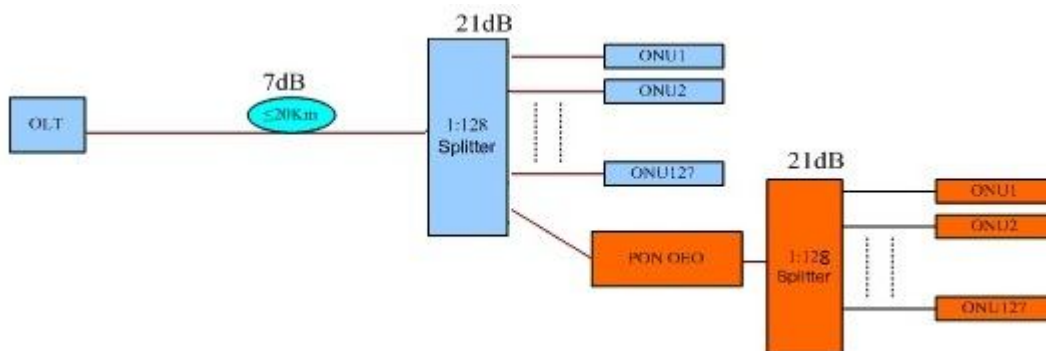


### 1. Extend Transmission Distance



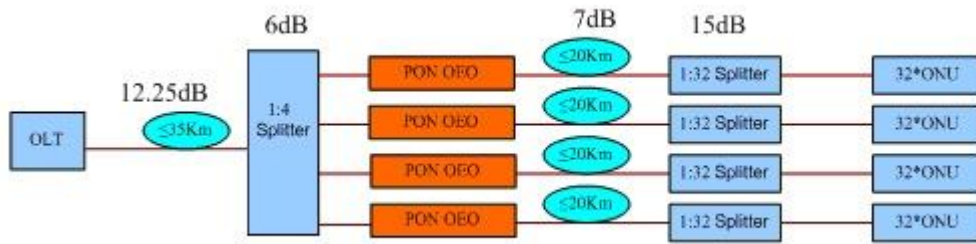
Note: EPON system shall support measurement of corresponding physical distance, and PON OEO device can only lengthen the distance on the basis of optical properties.

### 2. Extension of splitting ratio



Note: EPON system shall support online of corresponding 256 ONU, and PON OEO can only extend the splitting ratio on the basis of optical properties

### 3. Parallel application



*Note: EPON system shall support measurement of corresponding physical distance and differential range, and PON OEO device can only lengthen the distance on the basis of optical properties.*