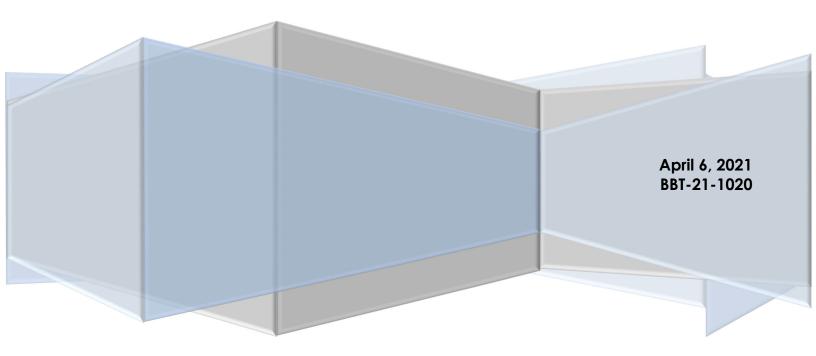


Global Market Share Report

10G PON Port Shipments - 2020

Author: Teresa Mastrangelo



l Use and reproduction of this Report are limited, and Company makes no warranties and accepts no liabilities with respect to the sources or content hereof, in accordance with paragraphs 2 and 3 of Agreement Terms & Conditions.



Table of Contents

- Executive Summary
- 2020 10G Market Share Highlights
 - 10G PON vs. GPON
- > 2020 10G PON Market Share
 - 10G PON Market Share by Vendor, All Variants, 2020 vs. 2019
 - o 10G EPON Market Share, 2020 vs. 2019
 - XG-PON1 Market Share, 2020 vs. 2019
 - XGS-PON OLT Market Share, 2020 vs. 2019
 - XGS-PON ONT Market Share, 2020 vs. 2019
 - NG-PON2 Market Share
- > 10G PON Overview
- Methodology

List of Figures & Tables

Figure 1: Global 10G PON OLT Port Shipments by Type, 2011-2020

- Figure 2: Global 10G PON OLT Port Shipments by Region, 2020 vs. 2019
- Figure 3: GPON vs. 10G PON Annual OLT Port Shipments (2011-2020)
- Figure 4: Vendor Market Share 10G PON OLT Port Shipments (all variants), 2020 vs. 2019
- Figure 5: Vendor Market Share 10G EPON OLT Port Shipments, 2020 vs 2019
- Figure 6: Vendor Market Share XG-PON1 OLT Port Shipments, 2020 vs. 2019
- Figure 7: XG-PON1 OLT Port Shipments by Region, 2020 vs. 2019
- Figure 8: Vendor Market Share XGS-PON OLT Port Shipments, 2020 vs. 2019
- Figure 9: XGS-PON OLT Port Shipments by Region, 2020 vs. 2019
- Figure 10: Vendor Market Share XGS-PON ONT Unit Shipments, 2020 vs. 2019
- Figure 11: XGS-PON ONT Unit Shipments by Region, 2020 vs. 2019

Table 1: PON Technology Evolution

Table 2: 10G PON Solutions by Key Vendors

Supplemental Spreadsheet:

This spreadsheet includes detailed vendor shipment information on 10G PON OLT port shipments by type and region. No revenue information is provided at this time.

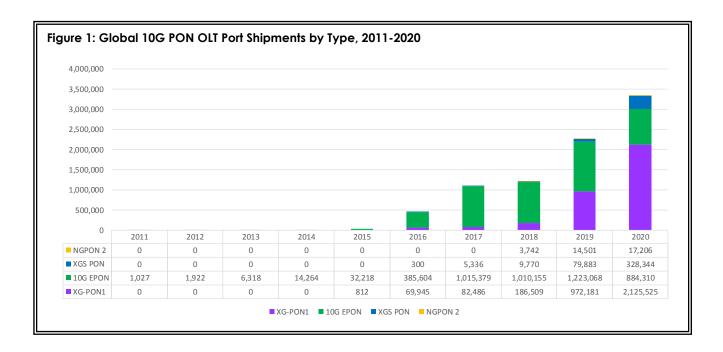
- List of Vendors Tracked
- Quarterly 10G PON Shipments by Type (1Q11-4Q20)
- 10G PON vs GPON by Region Annual (2011-2020)
- XGS PON OLT Ports by Vendor (1Q16-4Q20)
- XGS-PON ONT Shipments by Vendor (1Q16-4Q20)
- 10G EPON OLT Port Shipments by Vendor (1Q11-4Q20)
- XG-PON1 OLT Port Shipments by Vendor & Region (1Q15-4Q20)



Demand for 10G PON Soars in 2020

Executive Summary

The shift from GPON to 10G PON is well on its way – particularly in the China market – as operators begin to shift their OLT spending towards 10G PON. Overall, 10G PON shipments (across all types of 10G PON) grew by nearly 50 percent year-over-year, with the largest growth found in XG-PON1. As shown in Figure 1, global 10G PON OLT port shipments reached 3.36 million, with the largest portion going towards XG-PON1, followed by 10G EPON.



XGS-PON experienced the strongest annual growth, as demand accelerated and shipments quadrupled from the previous year, while shipments of XG-PON1 more than doubled from 2019.

As shown, demand for 10G EPON has rapidly declined as operators (particularly those in China) have already upgraded the majority of EPON systems. Additionally, the price point for XG-PON1 has become attractive enough for operators to upgrade GPON towards 10G PON, as operators leverage their existing GPON infrastructure.

Cumulative 10G (across all 10G PON types) OLT ports have reached, 8.5 million since shipments began in 2011. This compares to more than 50 million GPON OLT ports that have shipped.

10G PON ports represented 43 percent of all PON OLT ports in 2020, up from 25 percent in 2019.

Huawei is the 10G PON market share leader across all 10G PON ports in 2020. Huawei also leads in 10G EPON and XG-PON1 OLT port shipments, while Nokia is the market share leader in XGS-PON OLT shipments and Calix is the market share leader in NG-PON2 OLT port shipments.

In 2020, 837,000 XGS PON ONT units shipped, a significant increase over 2019 when only 37,000 were shipped. North America was the largest market for XGS-PON ONT unit shipments, accounting for nearly 90 percent of all shipments.



About this report

The Market Share Report tracks 10G PON port shipments across all variants (XG-PON1, 10G EPON, XGS-PON & NG-PON2). Data includes OLT port shipments and ONT unit shipments (XGS-PON only in current report) for both Global and Regional markets where applicable. This is a new report and provides historical data from the initial 10G PON deployments back to 2011. Data is updated quarterly and Market share is provided for both current quarter, as well as rolling 4-quarter.

10G PON companies tracked include ADTRAN, Calix, Casa Systems, Ciena, DZSi, FiberHome, Huawei, Iskratel, Nokia, Tellabs, ZTE and ZyXEL.

This report includes both a 16-page written report (including 11 Figures and 2 Tables) as well as a supplemental spreadsheet. This spreadsheet includes XGS PON OLT Ports by Vendor (1Q16-4Q20), XGS-PON ONT Shipments by Vendor (1Q16-4Q20), 10G EPON OLT Port Shipments by Vendor (1Q11-4Q20), XG-PON1 OLT Port Shipments by Vendor & Region (1Q15-4Q20).

This report is part of Broadbandtrends continuous information service, or is available for \$1495.

For more information about our services, or to order this report, please contact us at 540.725.9774 or via email at <u>sales@broadbandtrends.com</u>. Additionally this report may be purchased online at <u>http://www.broadbandtrends.com</u>

Methodology

Each quarter broadbandtrends requests 10G PON quarterly port shipment from FTTH equipment vendors. We request data for PON delivered from all platform types, including stand-alone PON platforms as well as through Multi-Service Access Platforms.

We request 10G PON by type (XG-PON1, 10G EPON, XGS-PON & NG-PON2). In addition, we request information on OLT versus ONT shipments. For ONT shipments, we request single family units as well as ONUs (multi-dwelling units). We also request all information to be broken out by region (Asia Pacific, CALA, EMEA, and North America).

To validate data, broadbandtrends also tracks press releases, earnings calls/reports, service provider activity and well as subscriber adoption. In addition, we will have discussions with vendors as necessary to clarify data.

In order to calculate revenue, we use an Average Selling Price per region for both the ONT and OLT unless this information is provided by the vendor. **** Vendor revenue for 10G PON is currently not provided.**

All vendors identified have provided shipment information, unless otherwise stated in the notes.

Market Share is calculated for both the current quarter as well as a rolling 4-quarter period.



About Broadbandtrends LLC

Broadbandtrends LLC is an independent market analysis and consulting firm specializing in the coverage of service provider transformation activity across the network, business and services segments. In addition, Broadbandtrends offers unparalleled coverage on the growing impact of broadband on the digital economy.

Broadband specific coverage is focused on the ubiquitous connectivity of ultra-broadband (both fixed and mobile) infrastructure, services and regulation; Connected Home, Multiscreen/OTT video, Smart Cities and IoT. Our goal is to provide unbiased, accurate and dependable research that will help drive tangible results for our clients.

For more information about our services and experience, please visit <u>www.broadbandtrends.com.</u>