DANI ALONSO OPTICAL CONNECTIVITY

Israel High-Speed Optical Connectivity 10G

Overview

Adtran says it will supply 10-Gbps optical line terminals (OLTs) to Israel''s Partner Communications.

Key Takeaways

Israel's optical network infrastructure now supports 10G connectivity through advanced fiber deployments and international submarine links, enabling multigigabit broadband to homes and businesses.Domestic Fiber Deployment

Israel has been rapidly expanding its fiber-to-the-home (FTTH) and fiber-to-the-premises (FTTP) networks. IBC Unlimited, for example, has deployed fiber to over 1.4 million households across 161 localities, offering speeds up to 10 Gbps using XGS-PON technology. The company plans to expand coverage to 2 million households, exceeding regulatory obligations, supported by financing agreements totaling approximately NIS 1.2 billion to fund network expansion and upgrades . Similarly, Partner Communications is upgrading its FTTP network to 10G speeds using Adtran's open, disaggregated OLT platform. This allows simultaneous provisioning of GPON and XGS-PON services over the same fiber, improving efficiency and enabling rapid deployment of multigigabit services . These deployments ensure that Israeli households and businesses can access high-speed broadband for applications like remote work, online education, and streaming.

International Connectivity

Israel's global connectivity is strengthened by Bezeq International's JONAH submarine cable, linking Tel Aviv to Bari, Italy over 2,300 km. This system supports 100 Gbps channels with a total capacity of 7.6 Tbps, leveraging advanced coherent optical technology. The cable integrates OALC-5 fiber, repeaters, and 1620 Light Manager terminals, allowing seamless upgrades from 10G to 100G without service interruption . This infrastructure enhances Israel's international bandwidth, supporting cloud services, data centers, and high-capacity IP-based applications.

Technological Advancements

Recent developments in Israel's optical networks include:

• XGS-PON and Combo PON: Enabling 10G symmetric speeds and smooth migration from GPON to XGS-PON .

• Silicon Photonics (SiPho) integration: Companies like DustPhotonics, now being acquired by Credo Technology, are advancing high-speed optical transceivers for data centers and AI-driven applications, which indirectly supports Israel's optical ecosystem .

• Nationwide fiber coverage: Government initiatives aim for near 100% fiber deployment across Israel, including peripheral areas and smaller communities .
Impact

These high-speed optical networks provide:

• Multigigabit broadband for residential and commercial users.

• Enhanced competition among ISPs, improving service quality and affordability.

• Support for emerging technologies such as cloud computing, AI applications, and high-definition streaming.

• Future-proof infrastructure capable of scaling from 10G to 100G and beyond.
Israel's combination of domestic fiber expansion and international submarine connectivity positions it as a leader in high-speed optical networking, ensuring robust, scalable, and ultra-fast internet access nationwide.

Article Content

Bezeq International and Alcatel-Lucent turn up ''JONAH'' – a high

This high-speed optical fiber system, named ''JONAH'', covers 2,300 kilometers across the Mediterranean, and is intended to address

Optic Fibers

Following the launch of the online system for cellular coverage, the Ministry of Communications is launching another online system

Israel''s Partner Communications taps Adtran for 10G FTTP build

Adtran says it will supply 10-Gbps optical line terminals (OLTs) to Israel''s Partner Communications. The mobile network

Partner Communications picks Adtran to quickly launch multigigabit ...

Adtran is providing an open, disaggregated 10G fiber access platform to enable the rapid delivery of multigigabit

Israel connects to optical fiber at the speed of light

The company is expected to reach dozens of additional towns and approximately 400,000 additional households during the year

IBC expands fiber optic deployment to approximately 2 million ...

Demand for advanced connectivity and data consumption in Israel are at an all-time high, and the decision we made today, to

New fund will pay telecom firms to deploy fiber optic cables for faster ...

With Israel suffering from lagging internet speeds, the Communications Ministry said Tuesday that it is planning a fund

10G SR Module for High-Speed Data Center Connectivity

Optimize your short-range data center network with 10G SR module — high-speed, low-latency, cost-effective connectivity for

Optical fiber infrastructure has been deployed in the peripheral areas ...

The Director General of the Ministry of Communications, Liran Avisar Ben-Horin stated: “Our goal is to reach every

10G-EPON

The 10 Gbit/s Ethernet Passive Optical Network standard, better known as 10G-EPON allows computer network connections over

10G Ethernet Cabling Solutions

The dramatic growth in business data throughput has led to increased demand and use for high-performing

Bezeq launches fiber-optic service

Over the past few months, Bezeq has been deploying a fiber-optic network throughout Israel, and in some places,

Bezeq joins fiber-optic cable fray

Israel''s phone company, Bezeq, is joining the race to construct fiber-optic networks linking homes and offices directly to

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Our extensive range of 10G SFP optical transceivers provides unmatched reliability, compatibility, and value for your high-speed

Israel linked to Italy with superfast submarine cable

Alcatel-Lucent and Bezeq International commercially launched a high speed optical fiber submarine cable link

Top Fiber Optic Telecommunications Companies in Israel

Xfiber is a telecommunications service provider that delivers high-speed and stable Internet connectivity throughout Israel, leveraging

HOT acquires fiber-optic network to build Israel''s high-speed Internet ...

Israel''s Internet infrastructure is generally seen as somewhat outdated, with broadband download speeds that rank

10GB SFP Module Guide: Types, Specs, and How to Choose

From high-density data centers to enterprise campuses and service provider networks, 10G optical transceivers continue to play a

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.