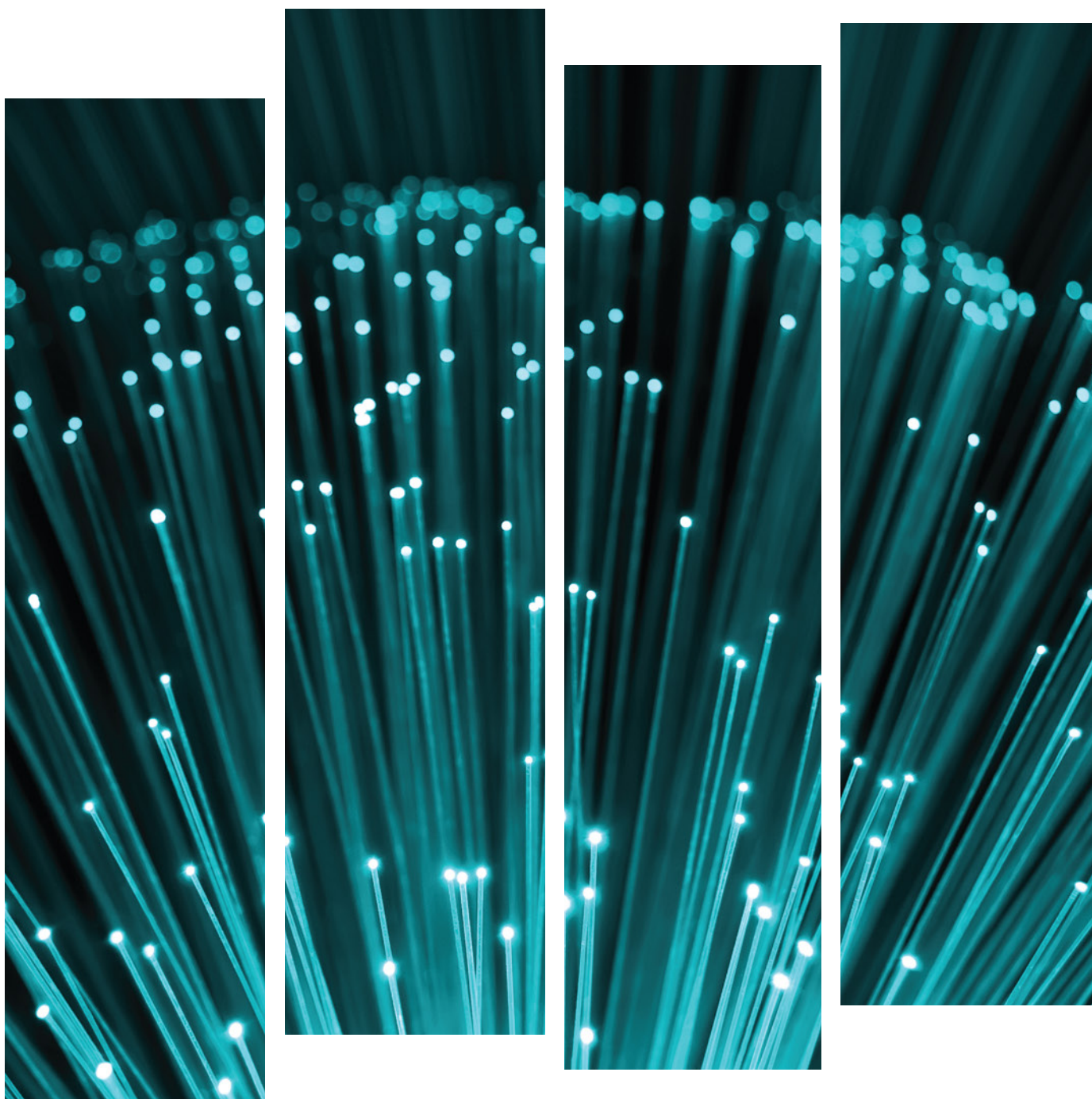


GPON

GPON
IN-A-BOX



**OPEN YOUR
NETWORK
TO THE FUTURE**

WHAT IS GPON IN-A-BOX?

GPON IN-A-BOX suite offers a package that includes all the components that are critical to the implementation of a GPON network. These components are provided to ensure the design, network construction, planning, supply of passive materials, active equipment and systems operations support.

SCALABLE AND FLEXIBLE GPON IN-A-BOX SOLUTIONS FOR YOUR BUSINESS

GPON IN-A-BOX solutions are scalable and flexible, so they protect your investment by encouraging gradual, needs driven, network growth. GPON IN-A-BOX's operations support systems optimize GPON/FTTx network operations, offering the detailed and precise information on network anomalies that is required to select the most suitable team for a given intervention. GPON IN-A-BOX offers a full turn-key service for the implementation of FTTx/GPON networks and project optimization, right from the first day.

With the experience that we have gained over the years, and given the close working relationship we keep with our clients, we have been able to develop a set of solutions designed to optimize the operation of this network. From the central office to the customer's home, GPON IN-A-BOX includes solutions that offer optimized management of the whole network.

WHO BENEFITS FROM IT?



Low user density rural sets



Condominium



Industrial park networks



High density urban networks



THE CHALLENGE

- Ever increasing worldwide broadband demand (mainly Video Streaming and cloud services);
- Market need for optical access fibre technologies;
- Develop know-how and intellectual property in order to have competitive and innovative PON solutions.

BUSINESS BENEFITS

- End-to-End FTTx active equipment differentiated portfolio, and value added professional services;
- Fast Time-to-Market Deployments ;
- Turning knowledge and experience into competitive advantages for our customers and partners.

OUR SOLUTION

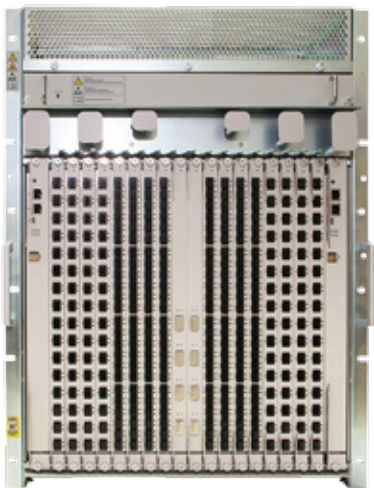
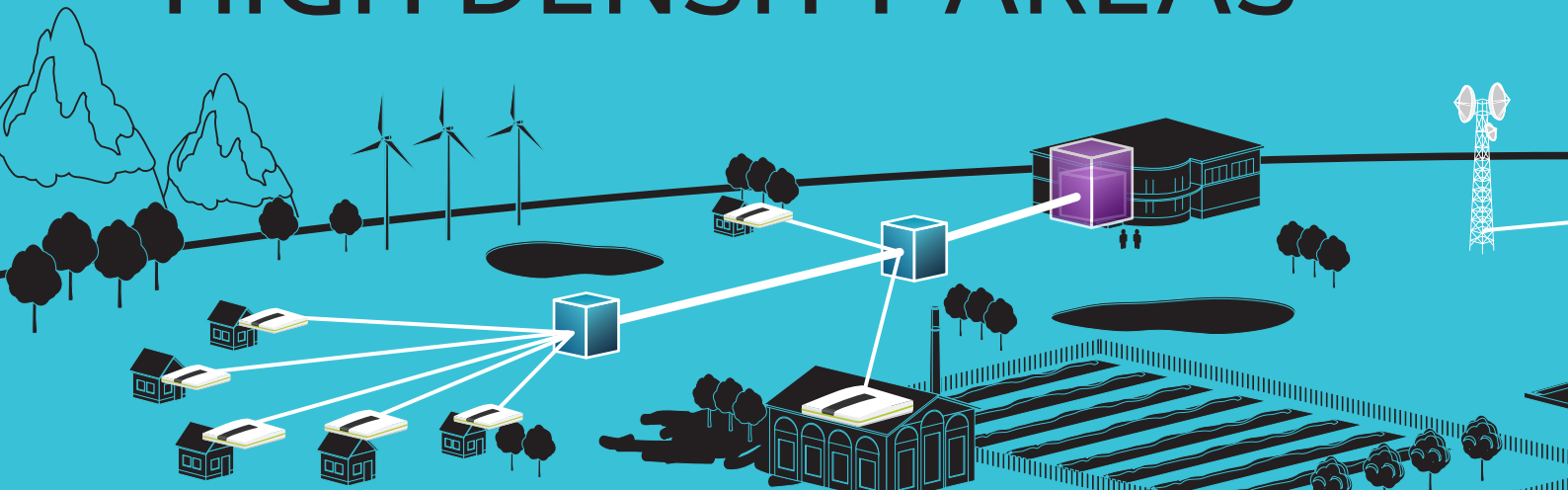
Highest Density OLT in the industry

- Scalable OLT portfolio ranging from 8 ports up to 256 PON ports (16,384 ONTs @ 1:64 split ratio) and 768 GE (Active Ethernet) ports from a single chassis;
- Ready to support Next Generation PON technologies (NG-PON2);
- PON and Point to Point Ethernet technologies from a single chassis;
- RF Overlay and SAT capabilities;
- Flexible Sync mechanisms such as SYNC-E PTP/IEEE 1588v2.

ONT/ONU suitable portfolio

- Interoperable models for Residential, Business and Mobile Backhaul applications. Indoor and Outdoor options;
- Various available Interfaces: GE, POTS (VoIP), VDSL2, T1/E1, Wi-Fi, G.FAST, MOCA 2.0, RF TV, SAT (DTH);
- Certified Equipment (BBF.247 / BBF.069).

SUITABLE FOR LOW AND HIGH DENSITY AREAS



OLT1T3: High Capacity GPON/XGPON OLT

- Designed for Metropolitan areas;
- High capacity – 16k clients in GPON and 768 in P2P;
- Multiplay services;
- Integrated RF Overlay;
- Point to Multipoint using GPON Technology;
- Point to point Active Ethernet. Technology.



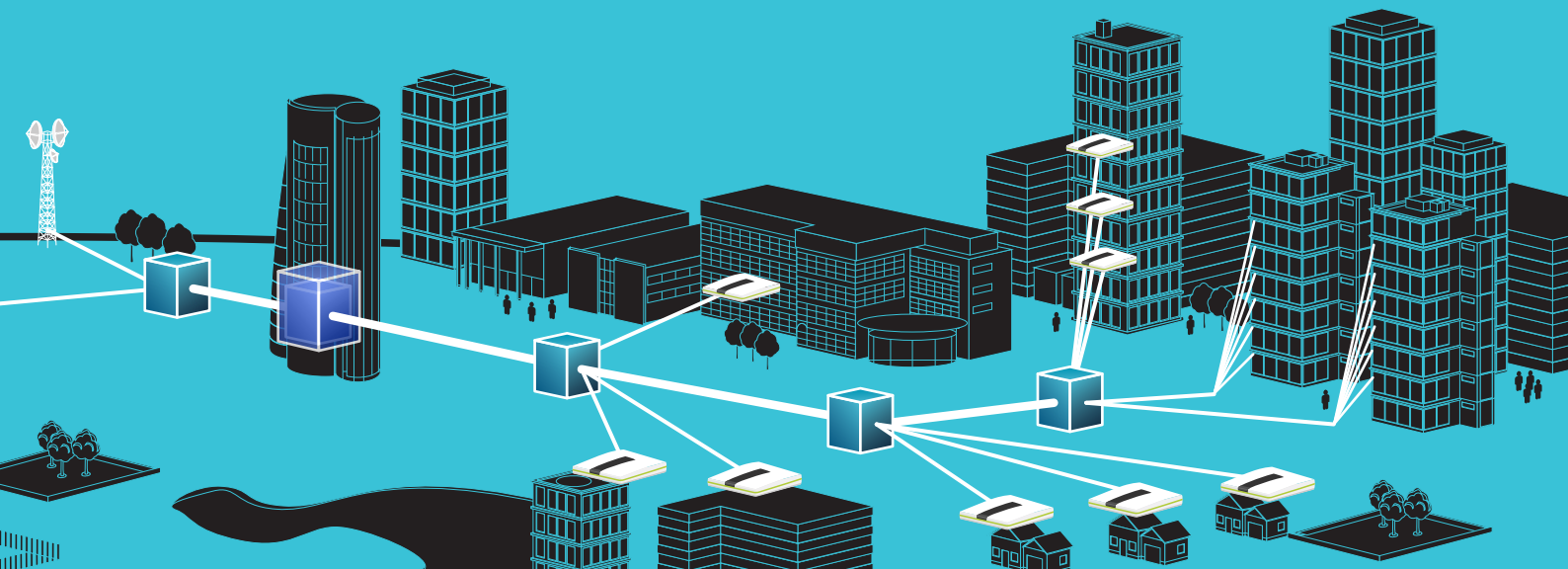
OLT1T2 - GPON OLT

- Up to 144 GPON Ports;
- Active Ethernet Technology;
- Use the OLT1T3 line cards.



OLT1T1- a modular low entry GPON OLT

- Up to 48 GPON Ports;
- Active Ethernet Technology;
- Use the OLT1T3 line cards.



OLT1T0: High Capacity GPON/XGPON OLT

- Up to 8 GPON Ports (512 customers);
- Designed for Business/Condominium/Rural Scenarios.



ONT7-RGW – Active Equipment

- Powerful and flexible Residential Gateway;
- GPON or Active Ethernet uplink;
- Supports Connected Home environments (TR-069);
- IPTV, VoIP, USB for media share;
- RF Overlay;
- Interoperability with main OLT vendors;
- Up to 4x 1 Gigabit Ethernet ports;
- High performance Wi-Fi based upon 802.11ac;
- GPON IoT Certification Program;
- Optional functionalities such as: MoCA 2.0, PoE.



Probe PON - Infrastructure monitor

- Optical time-domain reflectometer;
- Testing and maintenance;
- Improve service reliability;
- Reduce maintenance costs;
- High precision fault detection;
- Point-to-Point and/or Point-to-Multipoint Topologies.

FUTURE PROOF OPTICAL ACCESS PLATFORMS



STRONG
PARTNERSHIP
APPROACH



DIFFERENTIATED
PORTFOLIO



CAPEX AND
OPEX
GAINS

GPON AROUND THE WORLD



Portugal | Spain | Germany | Switzerland | Czech Republic | Slovakia | Poland | Russian Federation | Israel | Pakistan | India | Philippines | East Timor | Indonesia | United Arab Emirates | Egypt | Mozambique | Angola | S. Tome and Principe | Cape Verde | Brazil | Guatemala | Mexico | USA | Canada



ENGINEERING SERVICES



Network Services

The network services include the network survey, project planning, project building, inventory and monitoring.



Training Services

Training is, to us, a way of power thinking, creating, developing, innovating and creating links. Training is how we work our know-how!



Support, Operation and Maintenance Services

Backoffice functionality is assured on a permanent basis in support, operation and maintenance levels regarding our customer's network solutions and equipments.



Certification

Altice Labs is one of the first companies in the world to get the CE 2.0 (Carrier Ethernet 2.0) certification for its telecom network equipment in Ethernet technology.



ENABLING DIGITAL SOCIETY

ALTICE LABS

www.alticelabs.com



ABOUT ALTICE LABS

We have been delivering key technology services to the telecommunications sector for more than 65 years, following a vocation that has spanned both the analogue and digital ages.

Our mission is to support our clients building technological innovation and creating value. We do this by providing them with the advanced and differentiated solutions they need.

We are an innovation and transformation catalyst. Through our technologies, services and operations, we work to improve people's lives and the ways in which companies do business.