* **Overview**

The BDT121 Optical Network Terminal (ONT) is a high-end home gateway which provides 1\* POTS ports, 2\* GE Ethernet ports and dual band WIFI 11n 2\*2+11ac 2\*2.

The BDT121 features high-performance forwarding capabilities to ensure excellent experience with VoIP, Internet and video services. Therefore, the BDT121 provides a perfect terminal solution and future oriented service supporting capabilities for FTTH deployment. By using the GPON technology, ultra-broadband access is provided for home and SOHO users.

* **Hardware Specifications**

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| Chipset | BCM68461+Si32192+BCM43217+BCM4352 |
| PON | SC/APC |
| Flash | 128MB |
| RAM | 256MB |
| LAN | 2x GE Ethernet ports (10/100/1000Mbps) |
| FXS | 1 interface ports |
| Wireless | 802.11 b/g/n, up to 300Mbps; 11ac, up to 867Mbps; 2X5dbi 2.4G-5.8G External antenna; |
| USB | 1 USB2.0 Host |
| LED | Power, GPON, Optical, Internet , USB, 2.4G, 5G, LAN4, LAN3, LAN2, LAN1, FXS |
| Input Power | 12V 1.5A |
| Accessories | 1 x RJ45 cable 1.5M;  1 x RJ11 cable 1.5M;  1 x QIG;  PSU 12V 1.5A BIS, 110V ~240V |
| Gift box | Brown box |
| Others | One Reset button, one 2.4G/WPS button, one 5G/WPS button, one WiFi button, |
| Housing: white |
| Dimensions | L220mm\*W138mm\*H32mm |
| Installation | Wall mounting & desktop mounting |
| Power consumption | ≤20W |
| Environmental | Temperature:  - 0 to 45 ℃ (Standard Operating) - -40 to 70 ℃ (Non-operating) Humidity:  - 10% to 95% (Non-condensing, Standard Operating) - 5% to 95% (Non-condensing, Non-operating) |

* **Firmware Specification**

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| **GPON Features** | | |
| 1 | Fully ITU-T G.984.x Compliant framing | |
| 2 | 32 T-CONTs | |
| 3 | 256 GEM ports | |
| 4 | AES-128 Decryption with key generation & switching | |
| 5 | FEC upstream & downstream | |
| 6 | Support for multicast GEM port | |
| 7 | Mapping of GEM ports into a T-CONT with priority queues based scheduling | |
| **Protocol & Features Supported** | | |
| 1 | | Bridging & Switching ( 802.1d / 802.1q) |
| 2 | | RFC 2516, PPPoE |
| 3 | | QoS in upstream |
| 4 | | Routing: RIP v1, RIP v2 |
| 5 | | Support Static Routing |
| 6 | | NAT & PAT (RFC 1631) |
| 7 | | Support DMZ, Virtual Server , ALG |
| 8 | | NAT with Application Layer Gateway |
| 9 | | IP Routing: TCP, UDP, ICMP, ARP |
| 10 | | DHCP Client/Server |
| 11 | | IP multicasting IGMP v1/v2/v3, MLD v1/v2 |
| 12 | | Pass through/open/redirection and port mapping |
| 13 | | QoS for bandwidth control |
| 14 | | HTTP (web based) for firmware upgrade & configuration |
| 15 | | IP Packet filtering, MAC filtering, URL filtering |
| 16 | | IGMP/MLD Proxy/Snooping |
| 17 | | IEEE 802.1D Transparent Bridging |
| 18 | | DNS relay Agent |
| 19 | | Dynamic DNS |
| 20 | | UPnP support |
| 21 | | USB Storage |
| **Firewall Features** | | |
| 1 | | Stateful packet inspection |
| 2 | | DOS Protection |
| **Virtual private network support** | | |
| 1 | | Standard (IPSec, L2TP, PPTP) pass through |
| 2 | | Compatibility with other IPSec VPN gateways |
| 3 | | Supports login via www/Telnet |
| **Diagnostic** | | |
| 1 | | Support ping function |
| 2 | | Support Traceroute |
| **Management features & functionalities** | | |
| 1 | | HTTP upgrade |
| 2 | | Support TR069 |
| 3 | | Telnet remote access support |
| 4 | | support Web based configuration |
| 5 | | Support for backup & restore configuration to/from PC |
| 6 | | Support DHCP server for IP management |
| **Quality of Service requirement** | | |
| 1 | | Port based and IP based QoS |
| 2 | | 802.1p marking&Remarking |
| **General Specification & Operational requirement** | | |
| 1 | | System Log |
| 2 | | IPv4/IPv6 Dual Stack |
| **WIFI Features** | | |
| 1 | | Wireless Standard and feature - 802.11g/802.11b/802.11n/ac |
| 2 | | 64/128 bit WEP support |
| 3 | | MAC association control |
| 4 | | Support Multiple SSIDs |
| 5 | | Support for WEP, WPA, WPA2, WPA2 Enterprise(802.1X) |
| 6 | | Support WPS |
| **VOICE Features** | | |
| 1 | | SIP Protocol |
| 2 | | G.711, G.729, G.726 |
| 3 | | DTMF dialing |
| 4 | | Echo cancelling, VAD, CNI |
| 5 | | Caller ID, call waiting, call forwarding, 3-way call |
| 6 | | T.30 & T.38 FAX |