* **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 |