Specification

GPON Wi-Fi Gigabit Router

Q³

WLAN

WPS

POWER PON LOS TEL1 TEL2 LAN1 LAN2 LAN3 LAN4 WLAN WPS USB

BESTEL

Model: BTQ34i

FIBER TORNADO1

BESTEL

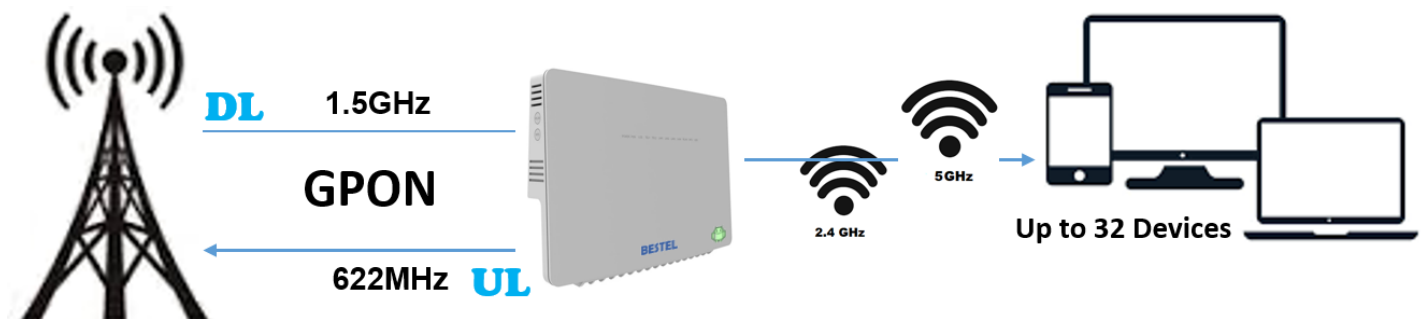**Maintenance – Free Connections**

abg WiFi nac

Introduction

BTQ34i is for broadband access market based on the introduction of EPON & GPON technology passive optical network terminal products. It's with EPON/GPON OLT are used together to provide a complete broadband access solution.

This model can integrate wireless function with meeting 802.11 n/b/g/ac technical standards, It has built-in high gain directional antenna, the wireless transmission rate up to 866Mbps. It has the characteristics of strong penetrating power and wide coverage. It can provide users with more efficient data transmission security.
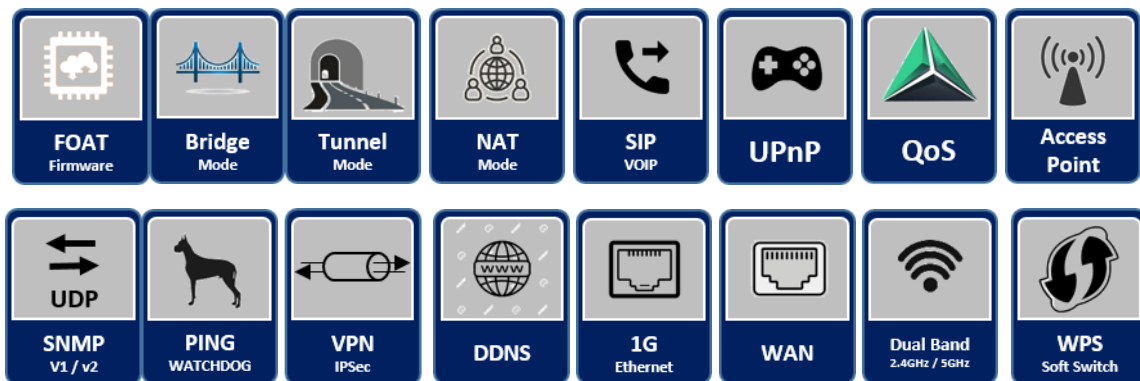
BTQ34i is highly advanced GPON indoor multi-service product solution for **Enterprise** and **SHSO** application. Specifically designed to meet integrated data, and dual bands Wi-Fi access needs for residential, business and enterprise users.

In this product, we provide Gigabit networking and dual bands Wi-Fi AP functionalities, it enables wide service coverage and provides high data throughput and networking features to customers who needs easy broadband access, hot-spot Wi-Fi connectivity.

Market Name: F I B E R   T O R N A D O 1

Technical Features

▫ Support Dual Band Wi-Fi (2.4GHz / 5GHz) Concurrent

▫ Support Dual Stack IPv4 / IPv6

▫ Support 4 LAN ports, 1GE

▫ Support 1 WAN port

▫ Support Small Network Management Protocol (SNMP)

▫ Support CWMP TR069 and Certification (Primary and Secondary)

▫ Support Server Network Time protocol (SNTP).

▫ Support two login access, root for administrator and admin for clients

▫ Support DDNS or DNS Agency

▫ Support WPS Soft Button

▫ Support Routing (NAT, Tunnel, and Bridge Mode)

▫ Support VPN (L2TP, GRE, PPTP)

▫ Support IPSec VPN

FOAT Firmware	Bridge Mode	Tunnel Mode	NAT Mode	SIP VOIP	UPnP	QoS	Access Point
SNMP V1 / v2	PING WATCHDOG	VPN IPSec	DDNS	1G Ethernet	WAN	Dual Band 2.4GHz / 5GHz	WPS Soft Switch

Market Name: FIBER TORNADO1

GPON SPECFICATIONS

Standard	FSAN G.984.2, Class B+
Authentication	Consistent with the SN or password
Downstream	2.488Gbps
Upstream	1.244Gbps
Receiver Sensitivity	-28dBm
Transmit Optical Power	0.5~5dBm
Saturation Optical Power	-8dBm
Wavelength Transmitter	1310nm
Wavelength Receiver	1490nm

EPON SPECFICATIONS

Standard	1000BASE-PX20+ Symmetric CTC2.1, CTC3.0
Authentication	Consistent with the MAC or LOID
Downstream	1.25Gbps
Upstream	1.25Gbps
Receiver Sensitivity	-27dBm
Transmit Optical Power	0~4dBM
Saturation Optical Power	-3dBm
Wavelength Transmitter	1310nm
Wavelength Receiver	1490nm

Market Name: FIBER TORNADO1

Made in Iran

ONT SPECIFICATIONS

GPON Standard	ITU-T G.984.X
Dimensions (LxWxH)	265mm x 16mm x 32mm
Weight	TDB
Wi-Fi Dual Band	2.4GHz (802.11 b/g/n and MIX) 5GHz (802.11 ac)
Wi-Fi Antenna	2 Separate PCB Built-in high gain, 2.4GHz, 5GHz
LED Indicators	WPS›WLAN›LAN4›LAN3›LAN2›LAN1›USB›TEL›LOS›PON
UNI	1POT + 4GE + 2.4G/5G Wi-Fi + 1USB
Restore Button	Press for 10 Sec. to factory restore settings
ONT Power Switch	ON/OFF Push Button
Power Supply	Input: Universal range 100V to 240V AC, Output DC 12V/2A
Static power consumption	3W
Maximum power consumption	10W
Installation mode	DESKTOP, WALL MOUNT

PORT SPECFICATIONS

Fiber Port	SC/PC single-mode fiber
	Flexible mapping between GEM Port and TCONT
	Bi-directional FEC
	SR-DBA and NSR-DBA
	Type B (Single-homing & Dual-homing)
Ethernet Port	Ethernet port-based VLAN tags and tag removal
	1:1 VLAN, N:1 VLAN or VLAN transparent transmission
	QinQ VLAN

Market Name: FIBER TORNADO1

	Limit on the number of learned MAC addresses
	Auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s
	Full/half duplex mode, auto MDI/MDI-X
POTS Port (Optional)	Maximum REN:4
	G.711A/μ, G.729a/b & G.722 encoding/decoding
	T.30/T.38/G.711 Fax mode
	DTMF, Emergency calls (with the SIP protocol)
USB Port	USB 2.0 interface
	Transmission Rate 480Mbps
	FTP-based network storage
	File/Print sharing basted on SAMRA
	DLNA function
WLAN	Comply with IEEE 802.11a/b/g/n/ac protocol standard
	5dBi antenna gain
	Maximum ideal rate up to 1.2Gbps
	2.4GHz supports 2*2 MIMO technology
	5GHz supports 2*2 MIMO technology
	WMM/Multiple SSIDs/WPS

Market Name: FIBER TORNADO1

SOFTWARE SPECIFICATIONS

LAN Network	• IPv4 address • DHCP Statics Lease • DHCP Relay • DHCP Server, Client
Wi-Fi (2.4GHz)	• Wi-Fi (Enable / Disable) • Frequency Range: 2.412GHz ~ 2.462GHz • Bandwidth: 20MHz / 40MHz • Access Point Isolate • Channel Mode: Manual, Auto • Channel Range 1 ~ 13 (Europe) • SSID: Hidden / Disable / Edit, Support four SSID • Security type: No Authentication, WPA-PSK, WPA2-PSK, WPA/WPA2-PSK, WPA3-PSK • WPA Algorithm: (TKIP/AES) • WPS Enable / Disable • Country Code: IRAN
Wi-Fi (5GHz)	• Wi-Fi (Enable / Disable) • Frequency Range: 5.18GHz ~ 5.7GHz • Bandwidth: 20MHz / 40MHz / 80MHz (Auto) • Access Point Isolate • Channel Mode: Manual, Auto • Channel Range 36 ~ 64 (Europe) • SSID: Hidden / Disable / Edit, • Security type: No Authentication, WPA-PSK, WPA2-PSK, WPA/WPA2-PSK, WPA3-PSK • WPA Algorithm: (TKIP/AES) • Country Code: IRAN
WAN Network	• WAN (Input Access)
VPN Server	• IPsec • L2TPv2 & v3 • PPTP
Data Services	• Port Range Forwarding • Port Range Triggering • DMZ Setting • UPnP Setting • ALG Setting

Market Name: FIBER TORNADO1

Made in Iran

Remote Access	• DDNS or DNS Agent • SNMP
Firewall	• Terminal Firewall (Enable / Disable) • IPv4/IPv6 Filter (Black List / white List) • MAC Filter (Black List / white List) • URL Filter (Black List / white List)
System Security	• Remote Web Login • Access Control • Block Port scanner • SPI Firewall
Terminal Security	• SSH • Telnet
Device Management	• SNMP v3 • SAMBA Service
CWMP	• Primary TR069
Network Diagnostics	• Ping • Traceroute
Administration	• Web Protocols (https 443 and http 80) • NTP Setting
Network Users	• DHCP Client List • Wi-Fi 2.4GHz Client List • Wi-Fi 5GHz Client List
Maintenance	• Date and time setting • Restore Factory Settings • Backup Configuration file • Firmware Upgrade locally Web UI • Firmware Over The Air (FOTA)

Market Name: FIBER TORNADO1

Wi-Fi SPECIFICATIONS

Standards Supported	• 802.11b/g/n compatible Wi-Fi • 802.11e QoS Enhancement (WMM) • 802.11i (WPA, WPA2) No Authentication, shared key, and pair-wise key authentication services
Channel Bandwidth	20MHz, 40MHz, 80MHz
Frequency 2.4GHz	2.412 (Channel 1) ~ 2.472 (Channel 13)
Frequency 5GHz	5.18 (Channel 36) ~ 5.32 (Channel 64)
TXRX	2T2R
MIMO	2x2 MIMO
Maximum Data Rate	• 802.11b: 11Mbps • 802.11g: 54Mbps • 802.11n: 300Mbps • 802.11ac: 866Mbps
Modulation	• DSSS with DBPSK and DQPSK, CCK • OFDM with BPSK, QPSK, 16QAM, and 64QAM
Convolutional Coding Rate:	1/2, 2/3, 3/4, and 5/6
Receive Sensitivity	• -51dBm @ 135Mbps, typical for 802.11ac • -64dBm @ 65Mbps, typical for 802.11n • -65dBm @ 54Mbps, typical for 802.11g • -76dBm @ 11Mbps, typical for 802.11b
Maximum Output Power	• 2.4GHz / 20dBm for ODFM & 18dBm for CCK modulation • 5GHz / 23dBm
Fast Receiver	Automatic Gain Control (AGC)
Antenna Type	Build-in separate antenna, 2.4GHz, 5GHz
Antenna Gain	2.4GHz / 3dBi 5GHz / 5dBi

Market Name: F I B E R   T O R N A D O 1

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0℃~45℃
Standby Temperature	-40℃~70℃
Operating Humidity	10% - 90%
Standby Humidity	5% - 90% RH

PACKAGE DELIVER

	Assembled Product
	Quick Installer Guide
	Remote Controller
	Ethernet Cable, Cat5
	HDMI Cable
	12V-2A AC / DC Adaptor
	2 x AAA 1.5v Battery

CONTACT INFORMATION

BONYAN ERTEBAT SAHAND FARHIKHTEGAN KISH COMPANY

BESTEL

R&D Director: Dr. Morawej
Contact No.: +98 912 649 3138
E-mail: ali.morawej@bestel.ir

Postal Code: 3187411039, 45
Registration Number 13673

Address: Payam Airport Economic Zone, Phase 3, Madiran Boulevard, First Alley, No. 9, Karaj, IRAN

Market Name: F I B E R T O R N A D O 1