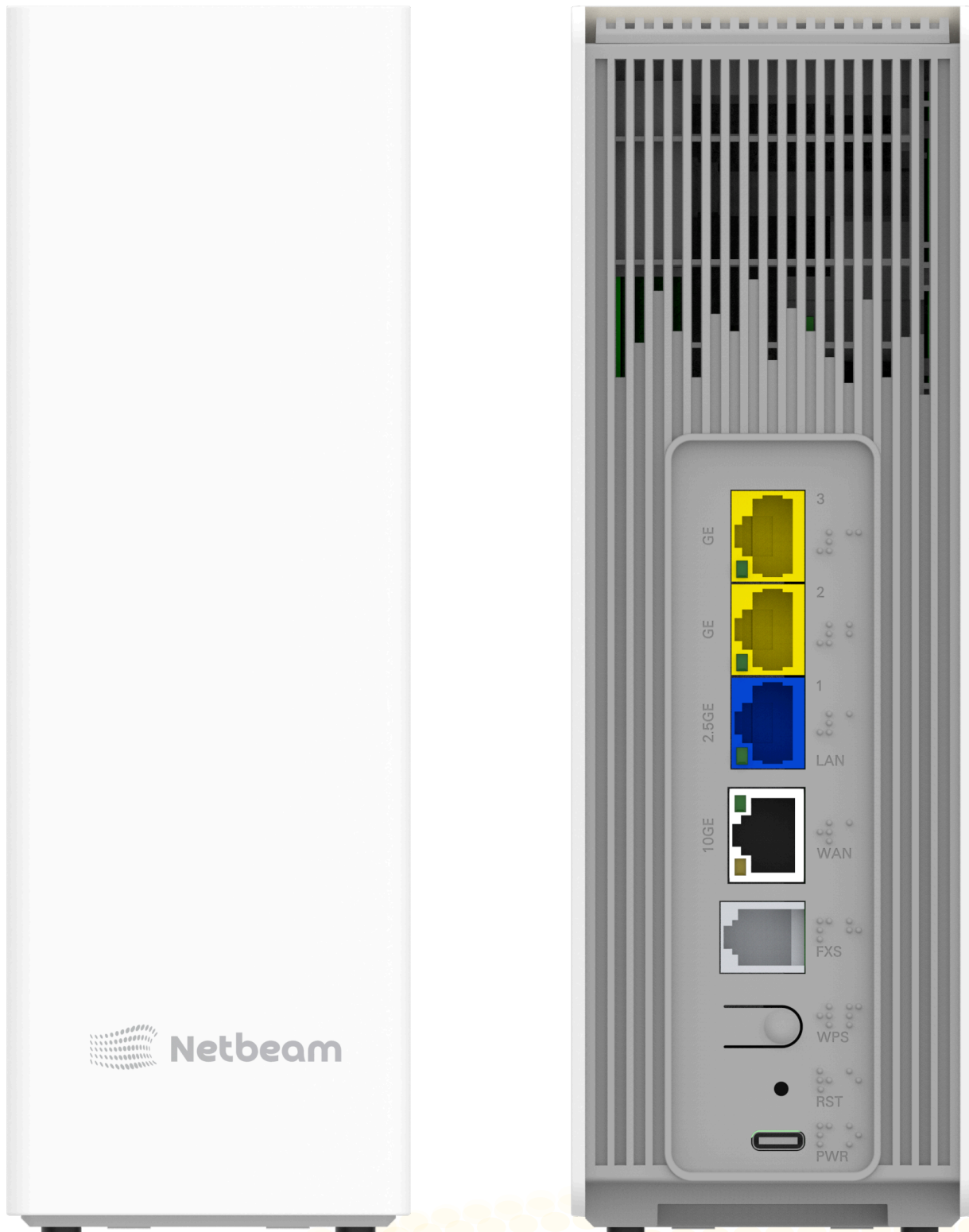# Tech Specs

Eco7100 — Tri-band Wi-Fi 7 Router — Data Sheet

Overview

The Eco7100 router is built on a cutting edge Broadcom chipset, based on the OpenWRT platform' It drives tri-band service across 2.4 GHz (3×3), 5 GHz (2×2) and 6 GHz (2×2), aggregates up to 9.6 Gbps, and pairs a 10G WAN with 2.5G + 1G LAN for flexible deployment. Managed over TR-069/TR-369/MQTT, it adds MLO, EasyMesh and robust policy/security to help ISPs expand coverage and keep support KPIs on track.

Key Chips

CPU	Broadcom BCM6764
Flash	128 MB
DDR	512 MB

Interface

WAN Ports	1 × 2.5 G Ethernet
LAN Ports	2 × 1 G Ethernet

Tri-band Wi-Fi 7

2.4 GHz	3×3 (up to 1032 Mbps)
5 GHz	2×2 (up to 2882 Mbps)
6 GHz	2×2 (up to 5765 Mbps) 320 MHz; 4096-QAM
Auto Channel Selection	TBC
Security	WPA2 / WPA3

Wi-Fi Features

MLO, MU-MIMO, OFDMA, TWT, interference detection & channel optimisation, Auto channel selection

Operating Modes

Router	DHCP / PPPoE / Static / Bridge
EasyMesh Extender	EasyMesh (wired/wireless), mesh topology view, seamless roaming (802.11k/v/r)

Management

Protocols	TR069, TR-369 and MQTT protocols
Setup Wizard	LAN/DHCP configuration; auto country-code
End User	Web GUI or iOS/Android App. Service Provider Vision remote, AI enabled, network management, Braille port descriptions

Services & WAN

Features	IPv4/IPv6 (DHCP/PPPoE/Static/Bridge); IPTV options; 4G/5G hotspot failover; MAC clone

Eco7100 — Tri-band Wi-Fi 7 Router — Data Sheet

Overview

- 10G-ready WAN + multi-gig LAN to unlock higher-tier packages without CPE swaps.
- Wi-Fi 7 performance up to 9.6 Gbps (320 MHz + 4096-QAM) for low-latency, high-density homes and SMBs.
- Operationally simple: TR-069/TR-369 (USP) and MQTT for remote lifecycle management and app/cloud workflows.
- Smarter RF with Multi-Link Operation (MLO) and EasyMesh for steadier links and simpler whole-home expansion.
- Lower OPEX with energy-saving algorithms that cut idle RF power while preserving performance.
- Accessible by design with Braille interface labeling to reduce install friction and support calls.

Tech Specs

🔒 Security & QoS

Firewall	Firewall (graded), device isolation, DDoS/ARP/DDNS-hijack protection, ad blocking; abnormal traffic/device detection with auto-isolation
QoS	QoS rules by traffic
Parental Controls	Access Time Limits,Device/Profile Pause, Speed limit, URL Filtering
Guest & Home Network	Easy Password Sharing, pop-up page login, subnet isolation
VPN	L2TP, PPTP, IPsec, WireGuard, OpenVPN client

🔄 System & Updates

Features	FOTA with power-loss recovery; packet capture; event logging/alerts; scheduled reboot; LED brightness/timer

((∘)) Coverage

Range	≈140 m^2 typical indoor

💡 LED Indicators

Status Indicators	1× system (red/orange/green) plus Ethernet port LEDs; states for startup/reset/upgrade/mesh.

⏻ Power

Power Input	USB-C 12 V⎓2.5 A (≈30 W)
Operating Temp	0°C – 50°C
Humidity	10 – 90 % (non-condensing)
Storage Temp	−30°C – 60°C
Smart Power Mangerment	Auto RF power reduction during idle periods

📱 Physical

Dimensions	Height 213.5mm, Width 150mm, Depth 70mm
Weight	TBC

📦 Packaging

Gift Box	Recycled packaging & cable ties, Eco7100, USB-C PD PSU, ethernet cable, QR code for quick connect