




OneNet™

Essential set

1 Router + 4 Nodes for OneNet™ MESH WiFi system

IONE-SET001-0OESS-OBM

Item: 5865

As we consume a growing number of services over the internet and add connected devices to our homes, a fast Wi-Fi connection with a stable, continuous whole-home coverage is an absolute must. At present, 1 in 3 homes are not satisfied with their Wi-Fi and large homes with an unusual layout or brick-made inner walls are likely to face disconnections, slow connectivity and dead-spots across their home. Smart home devices enhance our daily life, deliver safety and savings but together with the growing amount of videos we stream at home, increase the need for better coverage in the home and accelerates the demand for connectivity. The growing number of screens in every home and children spending an increasing amount of time on the internet drives the need for families to have better control over their Wi-Fi network.

Inverto's OneNet™ mesh Wi-Fi system addresses these issues, offering an upgraded Wi-Fi solution that is super fast, friendly and future proof.

OneNet™ employs a unique and patented high-speed transceiver circuitry and a dual band twin 2x2 antenna arrays to deliver solid throughput performance and support beamforming and MU-MIMO capabilities. It works with all internet service provider supplied equipment and speeds and is easy to install and configure. It can be managed from a phone with a user-friendly mobile app providing users full control over the network anytime, anywhere allowing instant setup, configuration, software updates, parental controls, remote access, and easy guest access. The mobile app is available for download on Android and iOS smartphones.

The OneNet™ Essential pack is supplied with 1x OneNet™ router and 4x OneNet™ mesh nodes, however, as your home and family expand, you can easily add more nodes.

Main Features:

- Proprietary MESH technology based on innovative radio frequency theory, increasing data transfer rates
- MU-MIMO and beamforming technologies
- Single network name & expandable coverage
- Future proof Wi-Fi through automatic software updates
- A simple app to setup, control and manage your Wi-Fi network
- Cost effective design
- Carrier-grade device management (TR-069)



Technical data

Antenna

Frequency bands	2.4 GHz & 5 GHz
Antenna	Proprietary WHEMS twin 2x2 antennas
Wireless rate	2.4G: 300 Mbps 2x2; 5G: 867 Mbps 2x2
Transmission standards (router)	802.3/802.3u/802.3ab
Wireless protocol	802.11 a/b/g/n/ac compatible
Dual frequency concurrency	Yes
Antenna gain	2.4 G: 3.5 dBi / 5G: 5.0 dBi (Router) 2.4 G: 1.5 dBi / 5G: 2.0 dBi (Node)

Ports

WAN (router)	1000 Base-T Ethernet x1
LAN (router)	1000 Base-T Ethernet x1
USB 2.0 (router)	1
LED	1 (Internet status & mesh status)
Reset button	1

Hardware

CPU	1 GHz
Flash	1 Gb
RAM	DDR2 128 MB

Software

WAN access mode	PPPoE / DHCP / static IP
STA access mode	DHCP / static IP
STA ACL	URL filter / mac filter / rate limit / time limit
App management	iOS / Android
Web local management	http://onenet.inverto.tv
VPN client	PPTP / L2TP
DDNS	DynDNS / Oray
LAN DHCP setting	LAN IP / pool / lease
Static DHCP lease	MAC and IP binding
Port forwarding	Yes
DMZ	Yes
WAN MAC clone	Yes
Firewall	ICMP Smurf, IP Land, IP Spoof, IP Teardrop, Ping of Death, TCP Scan, TCP SYN with data, UDP Bomb, UDP Echo chargen
System log	Yes
Customized DNS	Yes
Network diagnosis	Ping, Traceroute, Nslookup
Guest Wi-Fi	Yes
Bridge mode	Supported
Smart connect	2.4G/5G SSID separation

Power adapter (router)	DC 12 V/1.5 A, 100 V ~ 240 V 50 Hz/60 Hz
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Certification	FCC, IC, CE
Dimensions	Router 100 mm × 100 mm × 125.5 mm Node 60 mm × 66 mm × 60 mm

The OneNet™ app:



OneNet™ MESH Wi-Fi open space coverage (sq. m)

*Open-Space Coverage (sq. m)		# of Router													
		01	02	03	04	05	06	07	08	09	10	11	12	13	14
# of Node	00	300	450	600	750	900	1,050	1,200	1,350	1,500	1,650	1,800	1,950	2,100	2,250
	01	350	500	650	800	950	1,100	1,250	1,400	1,550	1,700	1,850	2,000	2,150	
	02	400	550	700	850	1,000	1,150	1,300	1,450	1,600	1,750	1,900	2,050		
	03	450	600	750	900	1,050	1,200	1,350	1,500	1,650	1,800	1,950			
	04	500	650	800	950	1,100	1,250	1,400	1,550	1,700	1,850				
	05	550	700	850	1,000	1,150	1,300	1,450	1,600	1,750					
	06	600	750	900	1,050	1,200	1,350	1,500	1,650						
	07	650	800	950	1,100	1,250	1,400	1,550							
	08	700	850	1,000	1,150	1,300	1,450								
	09		900	1,050	1,200	1,350									
	10		950	1,100	1,250										
11			1,150												

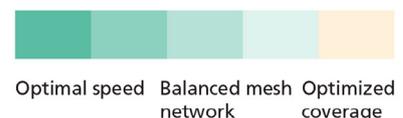
Guideline for coverage

- Dorm: 1*Router (10 - 30 sq. m)
- Loft: 1*Router (30 - 100 sq. m)
- Condo: 1*Router (50 - 150 sq. m)
- Apartment: 1*Router & 2*Nodes (150 - 250 sq. m)
- House: 2*Routers & 2*Nodes (250 - 400 sq. m)
- Villa: 2 Pro sets (400 - 650 sq. m)

* Obstacles will cause Wi-Fi deterioration

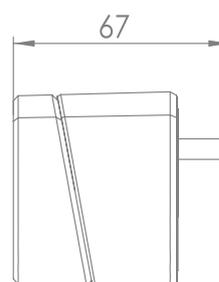
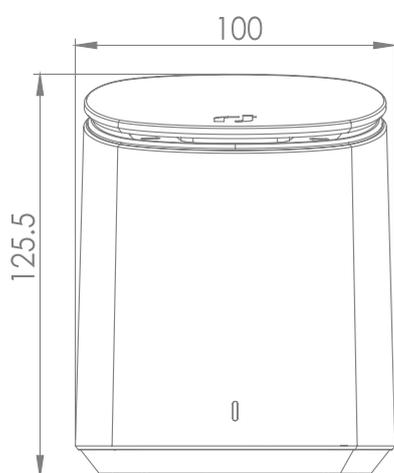
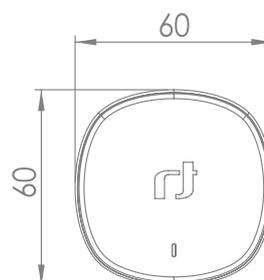
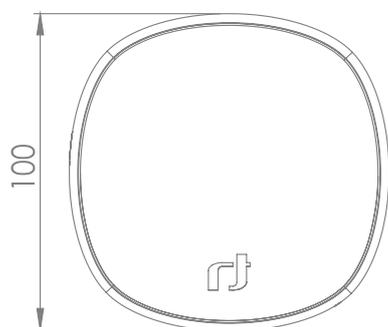
Network speed & coverage, impacted by # of mesh nodes (Router/Nodes)

Signal and speed deterioration by most common materials:
Concrete or metal: 86% | Glass: 72% | Wood or plastics: 29%



Interpretation: If a concrete wall is obstructing a OneNet™ access point, ~14% of Wi-Fi signal & speed will penetrate through!

Dimensions:



OneNet™ MESH Wi-Fi Router

OneNet™ MESH Wi-Fi Node

Available items:

5862	OneNet™ MESH Wi-Fi Node (EU)	IONE-NODOO1-EU000-OBM
5863	OneNet™ MESH Wi-Fi Router (EU)	IONE-RUTOO1-EU000-OBM
5864	OneNet™ Pro set - 3x routers for OneNet™ MESH Wi-Fi system (EU)	IONE-SETOO1-EUPRO-OBM
5865	OneNet™ Essential set - 1x router + 4x nodes for OneNet™ MESH Wi-Fi system (EU)	IONE-SETOO1-EUESS-OBM
5871	OneNet™ MESH Wi-Fi Node (UK)	IONE-NODOO1-UK000-OBM
5872	OneNet™ MESH Wi-Fi Router (UK)	IONE-RUTOO1-UK000-OBM
5873	OneNet™ Pro set - 3x routers for OneNet™ MESH Wi-Fi system (UK)	IONE-SETOO1-UKPRO-OBM
5874	OneNet™ Essential set - 1x router + 4x nodes for OneNet™ MESH Wi-Fi system (UK)	IONE-SETOO1-UKESS-OBM
5875	OneNet™ MESH Wi-Fi Node (US)	IONE-NODOO1-US000-OBM
5876	OneNet™ MESH Wi-Fi Router (US)	IONE-RUTOO1-US000-OBM
5877	OneNet™ Pro set - 3x routers for OneNet™ MESH Wi-Fi system (US)	IONE-SETOO1-USPRO-OBM
5878	OneNet™ Essential set - 1x router + 4x nodes for OneNet™ MESH Wi-Fi system (US)	IONE-SETOO1-USESS-OBM