Wi-Fi 6 ETHERNET ROUTER

i4880-series
Residential Wi-Fi 6 Router

The i4880 ethernet gateway takes performance to the next level with a 2.5 Gbps IPv4 and IPv6 routing engine and premium Wi-Fi 6 with a configuration of 8x8 + 4x4. Special attention has been put into creating a beautiful, minimalistic, yet fully flexible design that fully matches the modern home. Full backward compatibility for WAN/LAN, VoIP, and Wi-Fi makes the i4880 the obvious choice for a high-end residential router for all serious service providers.

• Premium Wi-Fi 6 configuration
• Non-blocking 2.5 Gbps architecture
• Modern Scandinavian design
• Fully managed

Model: i4883

Flexible installation
The i4880 is designed for all types of installations, both wall-mount and free-standing. In any installation, the i4880 allows for practical cable management, easy access to user-configurable buttons and intuitive LEDs for easy troubleshooting.

Easy cable management
With all interfaces hidden practically on the back of the i4880, all cables can be managed in an easy way regardless of the installation method. Ports are coloured for intuitive installation for first-time users.

Icotera

i4880 Residential Wi-Fi 6 Router

FEATURES

- Enterprise 8x8+4x4 Wi-Fi 6 configuration
- Vendor-independent
- Non-blocking 2.5 Gbps architecture
- Wi-Fi link rate up to 9.8 Gbps
- Low power consumption
- Optional operator branding
- Customized firmware

NETWORK COMMUNICATION
WAN INTERFACE

- 2.5G WAN
- Full-duplex transmission
- Auto-negotiation for speed and duplex
- Optional Energy-Efficient Ethernet (EEE)

LAN INTERFACE

- 1x 2.5G LAN
  2x 1G LAN
- Auto-negotiation for speed and duplex
- Integrated cable tester to detect the following metrics:
  - Short
  - Open
  - Impedance mismatch
  - Cable length

Wi-Fi INTERFACES

- Advanced WMM designed for long-range and resilient video and voice delivery
- Authentication methods:
  - Open
  - WPA2
  - WPA3-Personal
  - WPA3-Personal Transition Mode
- Up to 8 SSIDs
- MAC address filtering
- Beamforming
- 802.11v band steering and client roaming
- Neighbour scanning
- Advanced channel selection
- Software Tx power control
- Wireless client isolation
- Meshing — a built-in controller for Icotera i3560 access points

Wi-Fi 6

- 802.11ax 8x8:8 5 GHz + 4x4:4 2.4 GHz
- BW support: 20 MHz, 40 MHz, 80 MHz
- Modulation support: MCS 0-11
- Downlink MU-MIMO and OFDMA
- Up to 1024-QAM modulation
- Support for unequal MCS
- Support for LDPC, STBC
- Support for target wake time (TWT)

Wi-Fi 5

- 802.11ac Wave-2 8x8:8
- BW support: 20 MHz, 40 MHz, 80 MHz, 160 MHz
- MU-MIMO
- Support for LDPC, STBC
- Modulation support: MCS 0-11
- Up to 1024-QAM modulation

Wi-Fi 4

- 802.11b/g/n 4x4:4
- MIMO
- Modulation support: MCS 0-76

LAYER 2

- 16 bridge instances
- 64 byte forwarding at line rate
- Jumbo 9k packets
- IGMP v1/v2 snooping
- 802.1p marking
- VLAN support
- Wi-Fi support
- Transparent IPv6 forwarding
- DHCP relay with option 82
- 32k address entries
- Flexible L1 and L3 access control lists

LAYER 3

- Virtual interfaces
- Multiple WAN interfaces in one router
- 64 byte forwarding at line rate with routing/NAT
- IGMP v1/v2 proxy with fast-leave and monitoring
- Stateful IPv4 and IPv6 firewall
- Supports routing for IPv4 and IPv6
- IPv4:
  - SNAT, DNAT, DMZ
  - DNS proxy
  - DHCP client and server
- IPv6:
  - Prefix delegation

- PPPoE (termination)
- Tracking the connection status in the CLI
- 32k HW connection tracking
- RTSP stateful proxy
- Protocol helpers for: SIP, RTSP, FTP, TFTP, PPTP, L2TP, and IPSec
- Guest access

USB

- 1 x USB 2.0 host port (reserved for future use)

VoIP (optional)

- 2 separate POTS lines SIP (RFC3261)
- Up to 5 ringer equivalence numbers (REN)
- DTMF signalling
  - SIP INFO
  - Inband
  - Auto
  - RFC 2833
- Caller ID support (DTMF/FSK)
- CLIR
- Advanced dialplan
- Called party (B-Number) manipulation
- Class 5 services:
  - Forward all calls
  - Forward on busy
  - Forward on no answer
  - Call waiting
- Codecs:
  - G.711A a-law
  - G.711U μ-law
  - G.722
  - G.729
- Codec negotiation
- Modem or fax detection
- G.165 echo cancellation

MANAGEMENT AND MONITORING

- Shared or separate IP interface for management
- Configurable web interface for end users:
  - PPPoE WAN
  - Wi-Fi
  - Guest network
  - LAN network
  - Port forwarding
  - NAT loopback
  - DMZ
  - DynDNS
  - Status and monitoring

- Monitoring via telemetry streaming (ICONS)
- L1 and L3 filters for all local services
- SSHv2 with key authentication
- Zero-touch provisioning with DHCP and TR-069
- TR-069 with TLS:
  - TR-104 (VoIP)
  - TR-181 (Network)
- SNMP v1/v2
- Extensive debug possibilities
- Packet dumping
- All settings are stored locally in flash memory
- Dual bank flash memory with fail-safe firmware upgrading
- LED indicators brightness configurable by operators or end users
- Hardware watchdog
- Wake-on-LAN for the web interface and CLI
- L1 and L3 filters for all local services
- TR-143 for performance data and throughput statistics

OPERATIONAL SPECIFICATIONS

- DC 12 V input
- Power consumption maximum: 31.7 W
- Power consumption in idle state: 17.8 W
- Operating temperature: 5°C – 45°C
- Storage temperature: -20°C – 85°C
- Humidity: 5% – 95% (noncondensing)

PHYSICAL SPECIFICATIONS
CASING

- Size: 234 x 177 x 53 mm (W x H x D)
- Weight: 844 g without VoIP, 869 g with VoIP
- Front LED indicators configurable by operators or end users.
  - Power or WAN status such as link or provisioning
  - VoIP
  - Wi-Fi
- Status LED indicators for link, traffic, and duplex for each LAN port
- WPS button

INCLUDED IN THE BOX

- Icotera i488x gateway
- 12 V power supply unit
- Additional label with Wi-Fi credentials
- Ethernet cable

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i4880 configuration possibilities

| WAN | 2.5G LAN | TEL2 | TEL1 | LAN1 | LAN2 | USB | WPS | RESET POWER | ON/OFF |
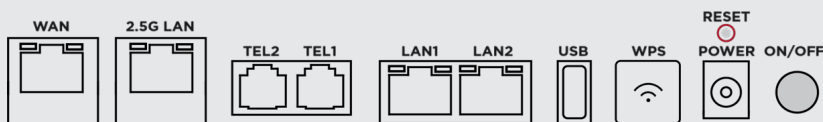
Gateway interface configurations

Model	Uplink	LAN	USB	POTS	Wi-Fi	Antennas
i4882-00	2.5G WAN	1x 2.5G LAN 2x 1G LAN	1 x USB 2.0	-	Wi-Fi 6	8x8 + 4x4
i4883-00	2.5G WAN	1x 2.5G LAN 2x 1G LAN	1 x USB 2.0	2x	Wi-Fi 6	8x8 + 4x4

For more information and feature requests, contact our Sales department at sales@icotera.com.