

Wi-Fi 6 ETHERNET ROUTER

i4880 series

Residential Wi-Fi 6 Router

The i4880 Ethernet gateways take 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.

i4880 Residential Wi-Fi 6 Router

FEATURES

- Enterprise 8x8+4x4 Wi-Fi 6 configuration
- 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 (RJ45)
- Full-duplex transmission
- Auto-negotiation for speed and duplex
- 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
- Transparent IPv6 forwarding
- 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
- DS-Lite
- 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 (i4883)

- 2 separate POTS lines SIP (RFC3261)
- VoIP in IPv4 and IPv6 networks
- Up to 5 ringer equivalence numbers (REN)
- Caller ID support (DTMF/FSK)
- DTMF signalling
 - SIP INFO
 - Inband
 - Auto
 - RFC 2833
- 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
- Management over IPv4 and IPv6 for i4883
- 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
- Hardware watchdog
- 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)

INCLUDED IN THE BOX

- Icotera i4882 or i4883 gateway
- 12 V power supply unit
- Additional label with Wi-Fi credentials
- Ethernet cable

PHYSICAL SPECIFICATIONS CASING

- Size: 234 x 177 x 53 mm (W x H x D)
- Weight: 844 g for i4882, 869 g for i4883
- 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

ESG and SUSTAINABILITY

Product data aligns with the European Sustainability Reporting Standards (ESRS). Icotera CO2 reduction targets are approved by the Science Based Target initiative (SBTi).



By 2030, Icotera will reduce the scope 1 and 2 greenhouse gas (GHG) emissions by 42%.

Climate (ESRS E1)

- Product footprint (cradle-to-gate): 30,3 kg CO₂ for i4882, 34,4 kg CO₂ for i4883 (producer standards: EcoVadis Silver, SBTi)

Pollution (ESRS E2)

- No hazardous substances
- No flame retardants or plastic softeners in plastic parts
- Halogen-free printed circuit boards
- Packaging: plastic-free, PE bag-free, 95% recycled cardboard
- Compliance with RoHS and the Swedish chemical tax rate for electrical equipment

Social (ESRS S2)

- Suppliers comply with the Icotera Supplier Code of Conduct: <https://bit.ly/icotera-code>

Distribution (ESRS E1)

- The CO₂ data on logistic solutions (ESRS E1) is available on request

Use

- Power consumption complies with the European Ecodesign Directive 2009/125/EC
- Power saving mode

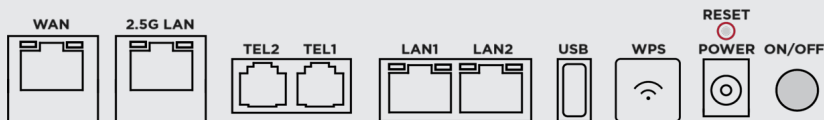
Refurbishment (ESRS E5)

- Refurbishment service available

End of life (ESRS E5)

- Disassemblable for recycling
- WEEE producer and packaging responsibility is handled through Elretur and Emballageretur

i4880 configuration possibilities



Gateway interface configurations

| Model | Uplink | LAN | USB | POTS | Wi-Fi | Antennas |
|-----------------|-----------------|--------------------------|-------------|------|---------|-----------|
| i4882-00 | 2.5G WAN (RJ45) | 1x 2.5G LAN 2x 1G LAN | 1 x USB 2.0 | - | Wi-Fi 6 | 8x8 + 4x4 |
| i4883-00 | 2.5G WAN (RJ45) | 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.