In:xtnd™

in:xtnd Access MA 2.5 2 Ethernet

In:xtnd™ Access MA 2.5 is a reliable ethernet over coax media converter

In:xtnd™ Access Access MA 2.5 is equipped with 2x 1 Gbps ethernet ports.

In:xtnd™ Access MA 2.5 communicates with in:xtnd Control using the MoCA Access™ 2.5 standard.

KEY FEATURES

- Front-end to Media Gateway, IPTV box or Wireless Router
- Connects to any antenna outlet in a home or office
- No software installation on the end-users computer
- Remotely configurable
- Remotely selectable RF-channels
- Easy self-installation by subscriber
- Based on MoCA Access 2.5 Profile D
- Approved for both Europe and North America
- Fully compatible with in:xtnd Control MA 2.5 and in:xtnd Control C251

INCOAX

SYSTEM OUTLINE
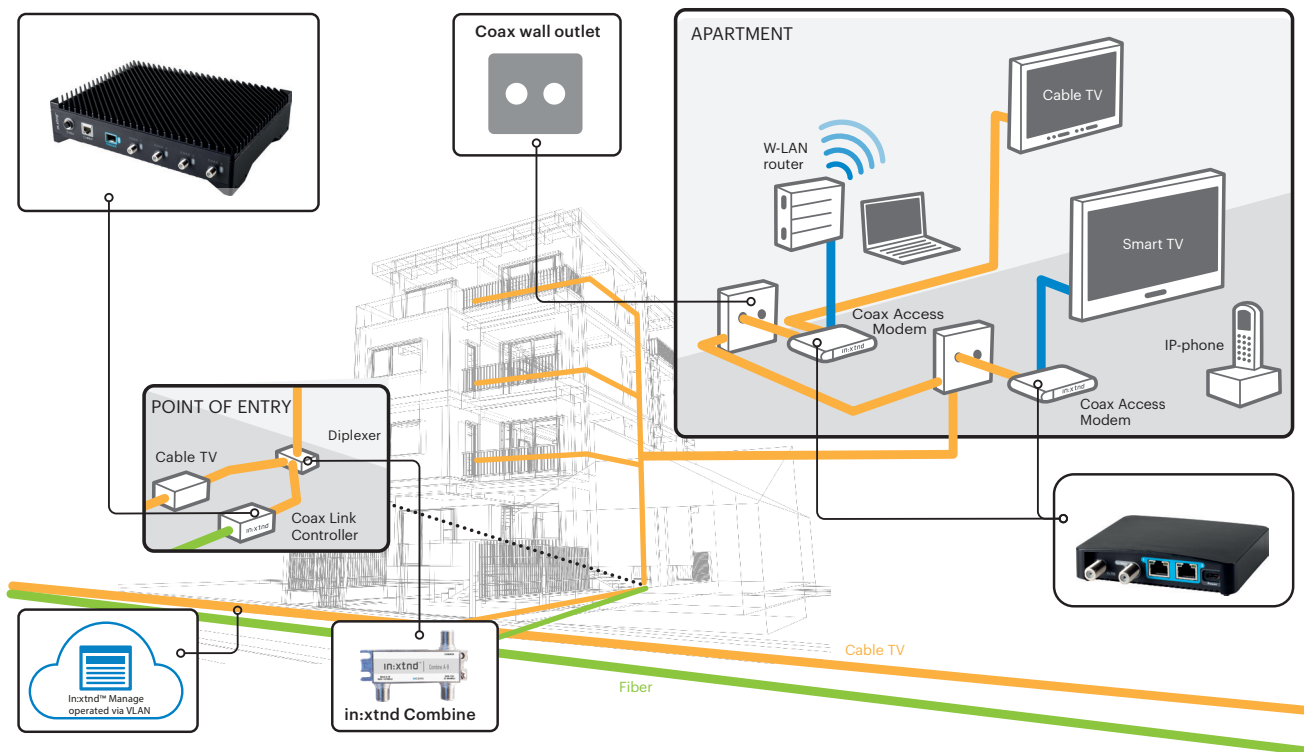
In:xtnd Access

In:xtnd Access is a reliable ethernet over coax modem supporting 2 x 1 Gbps. It connects to any antenna outlet in the subscribers home for easy self installation.
The pass through RF/VHF output supports all existing TV standards.

EASY
- No need to pull new cables.
- Minimal operational disturbance.
- Can be rolled out in stages.
- Coexists with existing satellite or cable TV.
- Upgraded and supported remotely.

FAST
- Fiber performance.
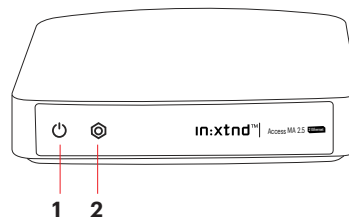- Symmetrical upload and download.
- Low latency.

SMART
- Fiber operators get better payback on investments.
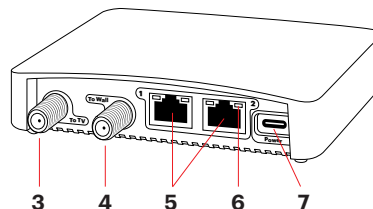- System owners get short time to revenue.
- The sustainable choice.

RELIABLE
- Based on MoCA Access™ 2.5, an industry standard for networking and broadband access over coax cabel.

Indicators & Connections

1 Power status
2 Coax link status

3 TV output (connect to TV)
4 Coax network input (connect to coax wall socket)
5 LAN ports
6 LAN status
7 Power port

TECHNICAL SPECIFICATIONS

Performance
- Ethernet over coax
- Based on MoCA Access 2.5 Profile D
- Up to 1 Gbps throughput per Ethernet port
- MoCA Bands: A–A, A–B, A–C, A–D, A–E
- Frequency range: 400 – 1675 MHz
- RF-channel bandwidth: 100 MHz
- Bonded operation with 3, 4 or 5 RF-channels supporting
- MAC Rate typically 1,5 / 2,0 / 2,5 Gbps
- PHY/MAC rate: up to 730/600 Mbps per 100 MHz RF channel
- Attenuation 100% link quality up to 55dB
- 15 dBm +/–3 dBm Max Output Power; automatically adjusted per modem
- Modulation: OFDM, QAM 1024/512/256/128/64/32/16/8, BPSK, QPSK
- Multiplexing methods: TDMA/TDD

Physical
- 1 x MoCA Access and TV-in port, 5-1675 MHz, F-female Connector
  - F-female Connector 3/8-UNEF32, 75 Ω
- 1 x TV-out 5-694 MHz, F-female Connector
  - F-female Connector 3/8-UNEF32, 75 Ω
- 2 x RJ-45 Ethernet ports 100/1000 Mbps, supports CAT5e, CAT6 UTP

Indicators
- Power on, Coax Link, Ethernet traffic

Dimensions & weight
- 97 x 28 x 112 mm (W x H x D)
- 160 g

Environmental
- Operating Temperature: 0 °C to +40 °C
- Humidity: 20% – 80%
- Altitude max 2000 m
- Storage (non-cond.): -20 °C to +50 °C & 5% to 90%
- RoHS, RoHS2, UL94-V0

Power
- 5 VDC nominal, USB-C plug.
- Power consumption typically 6 W
- Power adapter (EU/UK): FJ-SW1260501500DN
  Power adapter (US/CA): Y612-050150U
- Voltage input: 100 - 240 VAC; ~50/60 Hz; 0,4 A Max
- Protection class II, Over voltage category II

IEEE Standards
- IEEE 802.3u – Fast Ethernet
- IEEE 802.3z – Gigabit Ethernet
- IEEE 802.3ab – 1000BASE-T Gbps Ethernet
- IEEE 802.3ac – Q-tag
- IEEE 802.1p – QoS
- IEEE 802.1q – with full VLAN-ID range. Up to 4 VLAN per Access modem.

Approvals
- Marking modem: CE, FCC
  Marking power supply: CE, FCC; IC, ETL, UL (US/CA)
- EMC: EN55032:2015, EN55035:2017, FCC Part 15 Class B, ICES-003 Class B
- Safety: EN60950-1:2006/A11/A1/A12/A2, EN50581:2012, UL60950-1 1st ed, CAN/CSA-C22.2 NO.60950-1
- ROHS: ROHS 2.0

Security via Control
- DHCP snooping, Option 82 rewrite and trusted/untrusted clients, limit setting, conf. options per VLAN.
- Blocking of unknown CPE
- Broadcast storm protection from clients
- Support for PPPoE IA option 0 x 105 Remote ID

Multicast via Control
- IGMP snooping (v1, v2, v3 partially)
- IGMP filtering per VLAN
- Configurable IGMP timeout
- MVR
- Bandwidth reservation per multicast group

QoS via Control
- Traffic classification
- Mapping and remarking
- Congestion management
- Strict priority, four separate queues for broadcast, multicast and unicast
- Configurable Rate limitation per queue
- Configurable Upstream/Downstream ratio

Management via Control
- WEB GUI via https
- SOAP/XML interface via https://
- Statistics and system/version information
- Configuration
- Define and assign service profiles
- Built in spectrum analyzer
- Access through management VLAN or separate Management ethernet port.
- Remotely upgradable

INCOAX

About the Multimedia over Coax Alliance®

The Multimedia over Coax Alliance (MoCA®) is an industry standard alliance developing technology for the connected home. MoCA technology runs over the existing coaxial cabling, and is the in-home backbone for Wi-Fi®. Products integrating MoCA technology are found in the service provider, custom installer and consumer/retail channels.

The Alliance has more than 200 certified products and 50 members, including service providers, OEMs, CE manufacturers and IC vendors.

About MoCA Access™

MoCA Access is point-to-multipoint. It is designed to coexist with legacy services such as TV, DOCSIS, and cellular (4G/5G) technologies.

As a fiber extension technology, MoCA Access is well suited for operators and ISPs that are installing fiber-to-the-basement (FTTB) or fiber deep into the network, and want to use the existing coax for connection to each apartment or unit.

MoCA Access also appeals to commercial integrators in market segments such as hospitality/hotels, restaurants, offices, and any other buildings wired with coax.

About InCoax

InCoax Networks is innovating the future of broadband access. Through in:xtnd™, we provide the next-generation smart and sustainable networking solutions to the world's leading telecom and broadband service operators. For additional information about in:xtnd™, visit **incoax.com**.

Contacts

E-Mail: sales@incoax.com
Address: InCoax Networks AB
Utmarksvägen 4, S-802 91 Gävle, Sweden
Phone: +46 26 420 90 42

Version 1.0   2020-04-21

Inxtnd_Access_2ethernet_20200421.indd