In:xtnd™ Access A101 is a serie of reliable Ethernet over coax media converters.

In:xtnd™ Access A101 is equipped with a single 1 Gbps Ethernet port.

In:xtnd™ Access A101 communicates with in:xtnd Control using the MoCA Access™ 2.5 standard.

In:xtnd Access A101 modem combined with in:xtnd Control C251 or C254 allows full advantage of new system benefits.

## KEY FEATURES

- Front-end to Media Gateway, IPTV box or Wireless Router
- Connects to antenna outlet
- No software installation on the end-users computer
- Remotely configurable
- Easy self-installation by subscriber
- Based on MoCA Access 2.5 Profile D

Improved features with the new in:xtnd Access A101
- Improved link budget when combined with in:xtnd Control C251 or C254
- Improved filters to minimize signal interference
- Bracket included for easy mount
- Approved for both Europe and North America
- Fully compatible with previous in:xtnd versions

INCOAX

SYSTEM OUTLINE
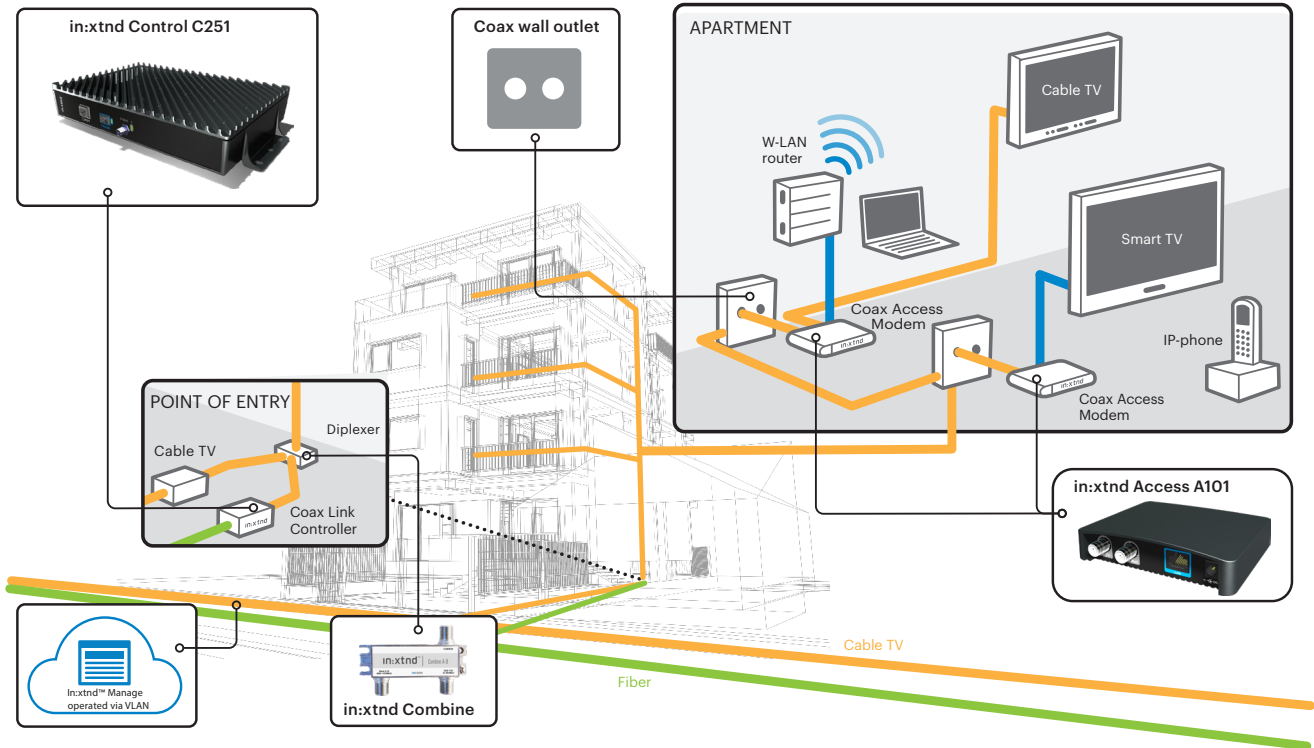
In:xtnd Access modem

In:xtnd Access is a serie of reliable Ethernet over coax modems capable of 1 Gbps data speed per Ethernet port depending on product version. 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. Auto configuration by Zero Touch Provisioning (ZTP) functionality makes it easy, fast and cost-effective to deploy new systems or add new devices.

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

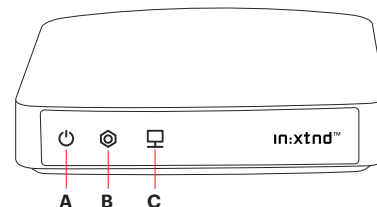- Fiber operators get better payback on investments.
- System owners get short time to revenue.
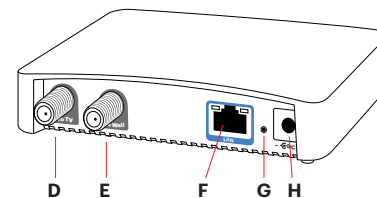- The sustainable choice.

RELIABLE

- Based on MoCA Access™ 2.5, an industry standard for networking and broadband access over coax cabel (2017).

Indicators & Connections

A Power status
B Coax link status
C LAN status

D TV output (connect to TV; not present on "IP" version)
E Coax Network input (connect to coax wall TV socket)
F LAN port
G Reset button
H 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–C, A–D, A–E
- RF-channel bandwidth: 100 MHz
- RF frequency range:
  - A101-IP   400-900 & 1025-1675 MHz
  - A101-AA   400-900 MHz
  - A101-AC   1025-1675 MHz
  - A101-AD   1125-1675 MHz
- Bonded operation with 3, 4 or 5 RF-channels supporting
- PHY Rate: Up to 700 Mbps per RF-channel
- MAC Rate: Up to 500 Mbps per RF-channel
- MAC Rate 1,5 /2,0 /2,5 Gbps
- 15 dBm +/–3 dBm Max Output Power; automatically adjusted per modem
- Modulation: 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 3/8-UNEF32, 75 Ω
- 1 x TV-out 5-694 MHz
  - F-female Connector 3/8-UNEF32, 75 Ω (not available on A101-IP)
- 1 x Ethernet port
  - RJ-45 connector; CAT5e, CAT6, CAT7 UTP
  - 100/1000 Mbps, IEEE 802.3 compliant

Indicators
- Power on, Coax Link status, LAN status

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

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

Power
- 5 VDC nominal
- Power consumption typically 4 W
- Power adapter: YSV10-1201000
- Voltage input: 100 - 240 VAC; ~50/60 Hz; 0.4 A Max
- Protection class II, Over voltage category II

Approvals
- Marking: CE, FCC, IC, ETL
- EMC: EN55032:2015 Class B, EN55035:2017, FCC Part 15 Class B, ICES-003 Class B
- Safety: IEC62368-1:2014, EN62368-1:2014, UL60950-1 1st ed, CAN/CSA-C22.2 NO.60950-1
- ROHS: ROHS 2.0

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

Security via Control
- DHCP snooping, Option 82 rewrite and trusted/untrusted clients, limit setting, configurable 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
- Auto Configuration by ZTP (Zero Touch Provisioning) **NEW!**
- Define and assign service profiles
- Built in spectrum analyzer
- Access through management VLAN or separate Management Ethernet port
- Remotely upgradable

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 27 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 Networks

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 **inxtnd.com**.

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