

INCOAX in:xtnd Combine AC2/AC3

DI- AND TRIPLEX FILTERS

In:xtnd Combine is a series of reliable di- and triplexer filters.

In:xtnd Combine AC2 is designed for connecting one MoCA Access channel from in:xtnd Control and a Terrestrial, Cable- or Satellite-TV signal into a single coaxial cable.

In:xtnd Combine AC3 connects two MoCA Access channels from in:xtnd Control and a FM/VHF signal into a single coaxial cable.



FEATURES

- High performance stability
- Low insertion loss
- Excellent return loss
- High band isolation
- Flat pass band
- High rejection stop band
- Efficient noise filtering
- Precision connector thread
- High RFI shielding
- Excellent plating quality
- Die-cast housing
- F-connectors, 3/8"-32UNEF thread
- Good weather resistance

In:xtnd Combine AC2 A-A

For MoCA Access band A-A co-existence with Satellite-TV (>950 MHz).

In:xtnd Combine AC2 A-C

For MoCA Access band A-C co-existence with Terrestrial- or Cable-TV / Docsis 3.0 (<862 MHz).

In:xtnd Combine AC2 A-D

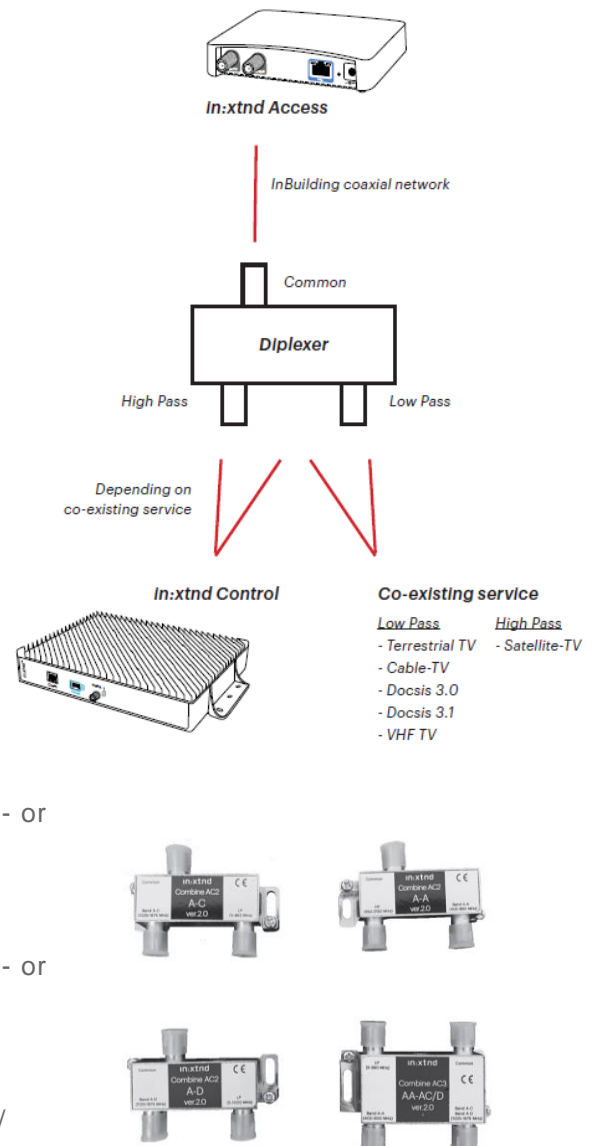
For MoCA Access band A-D co-existence with Terrestrial- or Cable-TV / Docsis 3.0 (<1002 Hz).

In:xtnd Combine AC2 A-E

For MoCA Access band A-E co-existence with Cable-TV / Docsis 3.1 (<1218 MHz).

In:xtnd Combine AC3 A-A A-C/D

For All-IP networks in co-existence with VHF TV (<350 MHz).



SPECIFICATIONS

Combine ac2 a-a

| | Min. | Typical | Max. | Unit |
|--|------|------------------|------|------|
| Impedance | | 75 | | Ohm |
| Low Pass - MoCA Access 2.5 Band A-A | | | | |
| Pass Band | | 400–860 | | MHz |
| RF Direction | | bidirectional | | |
| Insertion Loss (400–860 MHz) | | 2.0 | 2.5 | dB |
| Return Loss (400–860 MHz) | 14 | 16 | | dB |
| Stop Band | | 5-350 / 950–2150 | | MHz |
| Rejection, Stop Band | 40 | 45 | | dB |
| Pass band Signal Level | | 130 | 135 | dBμV |
| High Pass Port (SATV) | | | | |
| Pass Band | | 950–2150 | | MHz |
| RF Direction | | bidirectional | | |
| Insertion Loss (950–2150 MHz) | | 2.0 | 2.5 | dB |
| Return Loss (950–2150 MHz) | 14 | 16 | | dB |
| Stop Band | | 5–860 | | MHz |
| Rejection, Stop Band | | ≥ 50 | | dB |
| Pass band Signal Level | | 130 | 135 | dBμV |
| Common Port | | | | |
| Return Loss (400–860 MHz) | 14 | 16 | | dB |
| Return Loss (950–2150 MHz) | 14 | 16 | | dB |
| Low Pass - High Pass Port | | | | |
| Isolation | 40 | 45 | | dB |

Combine AC2 A-C

| | Min. | Typical | Max. | Unit |
|---|------|---------------|------|------|
| Impedance | | 75 | | Ohm |
| Low Pass LPF Port (TV/CATV/Docsis 3.0) | | | | |
| Pass Band | | 5–862 | | MHz |
| RF Direction | | bidirectional | | |
| Insertion Loss (5–862 MHz) | | 2.0 | 2.5 | dB |
| Return Loss (5–862 MHz) | 14 | 16 | | dB |
| Stop Band | | 1025–1675 | | MHz |
| Rejection (1025–1675 MHz) | 40 | 45 | | dB |
| Pass band Signal Level | | 106 | 120 | dBμV |
| MoCA Access 2.5 Band A-C | | | | |
| Pass Band | | 1025–1675 | | MHz |
| RF Direction | | bidirectional | | |
| Insertion Loss (1025–1675 MHz) | | 2.0 | 2.5 | dB |
| Return Loss (1025–1675 MHz) | 14 | 16 | | dB |
| Stop Band | | 5–862 | | MHz |
| Rejection, Stop Band | 40 | 45 | | dB |
| Pass band Signal Level | | 130 | 135 | dBμV |
| Common Port | | | | |
| Return Loss (5–862 MHz) | 14 | 16 | | dB |
| Return Loss (1025–1675 MHz) | 14 | 16 | | dB |
| Low Pass - High Pass Port | | | | |
| Isolation | 40 | 45 | | dB |

Combine AC2 A-D

| | Min. | Typical | Max. | Unit |
|---|------|---------------|------|------|
| Impedance | | 75 | | Ohm |
| Low Pass Port (TV/CATV/Docsis 3.0) | | | | |
| Pass Band | | 5–1002 | | MHz |
| RF Direction | | bidirectional | | |
| Insertion Loss (5–1002 MHz) | | 2.0 | 2.5 | dB |
| Return Loss (5–1002 MHz) | 12 | 14 | | dB |
| Stop Band | | 1125–1675 | | MHz |
| Rejection (1125–1675 MHz) | 40 | 45 | | dB |
| Pass band Signal Level | | 130 | 135 | dBμV |
| MoCA Access 2.5 Band A-D | | | | |
| Pass Band | | 1125–1675 | | MHz |
| RF Direction | | bidirectional | | |
| Insertion Loss (1125–1675 MHz) | | 2.0 | 2.5 | dB |
| Return Loss (1125–1675 MHz) | 12 | 14 | | dB |
| Stop Band | | 5–1002 | | MHz |
| Rejection (5–1002 MHz) | 40 | 45 | | dB |
| Pass band Signal Level | | 130 | 135 | dBμV |
| Common Port | | | | |
| Return Loss (5–1002 MHz) | 12 | 14 | | dB |
| Return Loss (1125–1675 MHz) | 12 | 14 | | dB |
| Low Pass - High Pass Port | | | | |
| Isolation | 40 | 45 | | dB |

Combine AC2 A-E

| | Min. | Typical | Max. | Unit |
|--|------|---------------|------|------|
| Impedance | | 75 | | Ohm |
| Low Pass Port (CATV/Docsis 3.1) | | | | |
| Pass Band | | 5–1218 | | MHz |
| RF Direction | | bidirectional | | |
| Insertion Loss (5–1218 MHz) | | 2.0 | 2.5 | dB |
| Return Loss (5–1218 MHz) | 12 | 14 | | dB |
| Stop Band | | 1375–1675 | | MHz |
| Rejection (1375–1675 MHz) | 38 | 43 | | dB |
| Pass band Signal Level | | 130 | 135 | dBμV |
| MoCA Access 2.5 Band A-E | | | | |
| Pass Band | | 1375–1675 | | MHz |
| RF Direction | | bidirectional | | |
| Insertion Loss, Pass Band | | 2.0 | 2.5 | dB |
| Return Loss, Pass Band | 12 | 14 | | dB |
| Stop Band | | 5–1218 | | MHz |
| Rejection (5–1218 MHz) | 40 | 45 | | dB |
| Pass band Signal Level | | 130 | 135 | dBμV |
| Common Port | | | | |
| Return Loss (5–1218 MHz) | 12 | 14 | | dB |
| Return Loss (1375–1675 MHz) | 12 | 14 | | dB |
| Low Pass - High Pass Port | | | | |
| Isolation | 40 | 45 | | dB |

Combine AC3 A-A/A-C

| | Min. | Typical | Max. | Unit |
|--|------|-------------------|------|------|
| Impedance | | 75 | | Ohm |
| Low Pass Port (VHF TV) | | | | |
| Pass Band | | 5–350 | | MHz |
| RF Direction | | input direction | | |
| Insertion Loss (5-350 MHz) | | | 2.0 | dB |
| Return Loss (5-350 MHz) | 16 | 18 | | dB |
| Stop Band | | 400–1675 | | MHz |
| Rejection (400-1675 MHz) | 45 | 50 | | dB |
| Pass band Signal Level | | 106 | 130 | dBμV |
| MoCA Access 2.5 Band A-A | | | | |
| Pass Band | | 400–900 | | MHz |
| RF Direction | | bidirectional | | |
| Insertion Loss (400-900 MHz) | | 2.0 | 2.5 | dB |
| Return Loss (400-900 MHz) | 14 | 16 | | dB |
| Stop Band | | 5–350 / 1025–1675 | | MHz |
| Rejection (5–350 MHz) | 40 | 45 | | dB |
| Rejection (1025–1675 MHz) | 40 | 45 | | dB |
| Pass band Signal Level | | 130 | 135 | dBμV |
| MoCA Access 2.5 Band A-C (/A-D) | | | | |
| Pass Band | | 1025–1675 | | MHz |
| RF Direction | | bidirectional | | |
| Insertion Loss (1025-1675 MHz) | | 2.0 | 2.5 | dB |
| Return Loss (1025-1675 MHz) | 12 | 14 | | dB |
| Stop Band | | 5–900 | | MHz |
| Rejection (5-900 MHz) | 45 | 50 | | dB |
| Pass band Signal Level | | 130 | 135 | dBμV |
| Common Port | | | | |
| Return Loss (5–350 MHz) | 12 | 14 | | dB |
| Return Loss (400-900 MHz) | 12 | 14 | | dB |
| Return Loss (1025–1675 MHz) | 12 | 14 | | dB |
| Low Pass - Band A-A - Band A-C (/A-D) | | | | |
| Isolation | 38 | 43 | | dB |

Combine AC2 / AC3

| | Description | Unit |
|------------------------|----------------------------|------|
| Housing | Zinc Alloy Die-cast | |
| Connector | 75 Ohm, Female "F" type | |
| Connector Screw Thread | 3/8"–32UNEF | inch |
| Dimensions | 74.5 (L) x 21 (W) x 18 (H) | mm |
| Net Weight | 60 | g |
| IP-Class | IP21 | |
| Temperature | -40 to +70 | °C |
| Certification | CE | |

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.