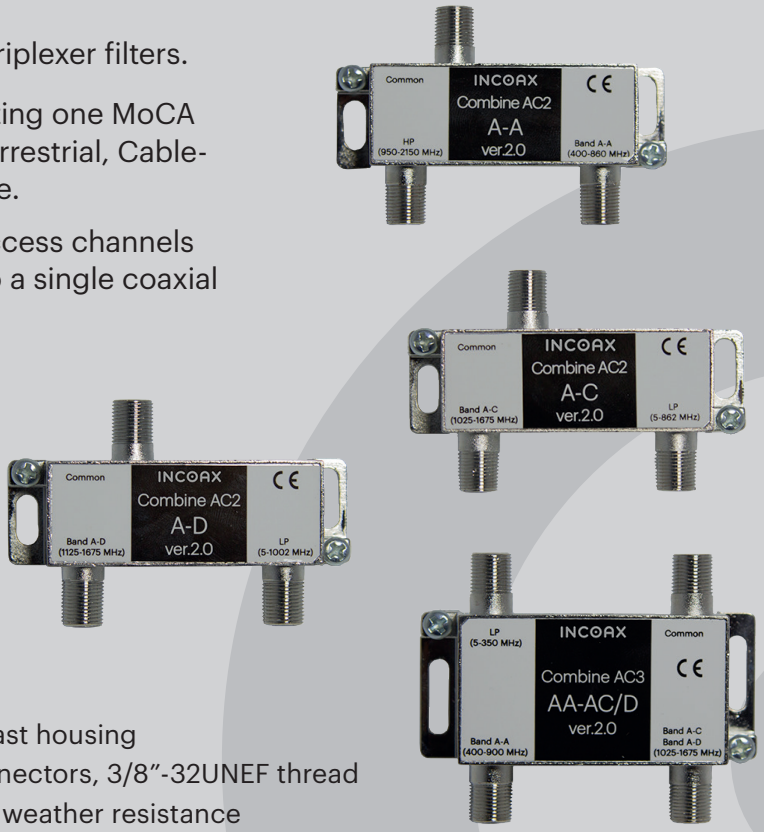
Di- & triplexer filters

InCoax Combine is a serie of reliable di- and triplexer filters.

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

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



KEY 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

InCoax Combine

InCoax Combine is a serie of reliable di- & triplexers capable of combining signals from InCoax Control and Terrestrial, Cable- or Satellite-TV, DOCSiS 3.0 or 3.1. Low insertion loss, high band isolation and effective noise filtering secures optimal and reliable signal quality with minimal interference.

InCoax Combine AC2 A-A
For MoCA Access band A-A(S) co-existence with Satellite-TV (>950 MHz).

InCoax Combine AC2 A-B
For MoCA Access band A-B co-existence with Terrestrial-TV (<694 MHz).

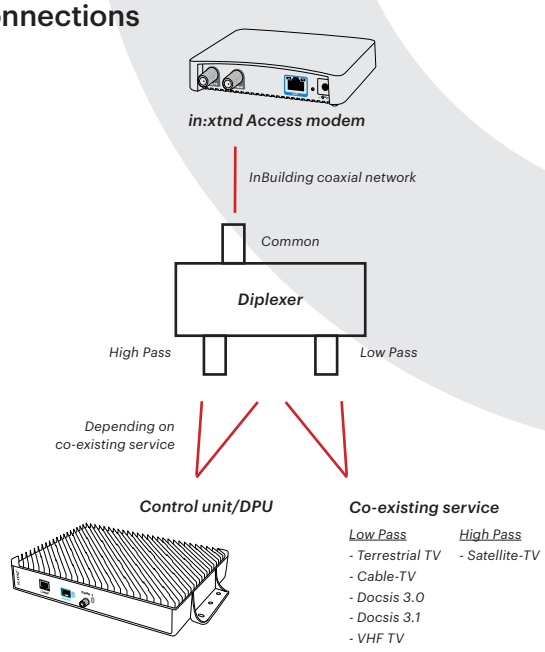
InCoax Combine AC2 A-C
For MoCA Access band A-C co-existence with Terrestrial- or Cable-TV/ DOCSiS 3.0 (<862 MHz).

InCoax Combine AC2 A-D
For MoCA Access band A-D co-existence with Terrestrial- or Cable-TV/ DOCSiS 3.0 (<1002 MHz).

InCoax Combine AC2 A-E
For MoCA Access band A-E co-existence with Cable-TV /DOCSiS 3.1 (<1218 MHz).

InCoax Combine AC3 A-A A-C/D
For ‘All-IP’ networks in co-existence with VHF TV (<350 MHz).

Connections



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TECHNICAL SPECIFICATIONS

Combine AC2 A-A	Min.	Typical	Max.	Unit
Impedance		75		Ohm
Low Pass - MoCA Access 2.5 Band A-A(S)				
Pass Band		400–860		MHz
RF Direction		bidirectional		
Insertion Loss (400–800 MHz)		2.0	2.5	dB
Return Loss (400–800 MHz)	14	16		dB
Stop Band		5-350 / 950–2150		MHz
Rejection, Stop Band	40	45		dB
Pass band Signal Level		120	125	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		5–800		MHz
Rejection, Stop Band		≥ 50		dB
Pass band Signal Level		120	125	dBµV
Common Port				
Return Loss (400–800 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		120	125	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		120	125	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		120	125	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		120	125	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		120	125	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		120	125	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

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TECHNICAL SPECIFICATIONS

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		120	125	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		120	125	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		120	125	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 AC3 A-AS/HP	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		400–2150		MHz
Rejection (400-1675 MHz)	45	50		dB
Pass band Signal Level		120	125	dBµV
MoCA Access 2.5 Band A-AS				
Pass Band		400–800		MHz
RF Direction		bidirectional		
Insertion Loss (400-800 MHz)		2.0	2.5	dB
Return Loss (400-800 MHz)	14	16		dB
Stop Band		5–350 / 950–2150		MHz
Rejection (5–350 MHz)	40	45		dB
Rejection (950–2150 MHz)	40	45		dB
Pass band Signal Level		120	125	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)	12	14		dB
Stop Band		5–800		MHz
Rejection (5-800 MHz)	45	50		dB
Pass band Signal Level		120	125	dBµV
Common Port				
Return Loss (5–350 MHz)	12	14		dB
Return Loss (400-800 MHz)	12	14		dB
Return Loss (950–2150 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	in
Dimensions	2.9 (L) × 0.8 (W) × 0.7 (H)	in
Net Weight	2.1	oz
IP-Class	IP21	
Temperature	-40 to +158	°F
Certification	CE	

About InCoax Networks

InCoax Networks AB re-purposes existing property coaxial networks in fiber and fixed wireless access (FWA) extension deployments for Communication Service Providers (CSP) globally.

The technology is a high performance, future proof, reliable and cost-effective complement, that reduces installation time and improves take-up rate, to boost digital inclusion and Internet access for all.

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