

# passive tv/fm/data outlets



## Product information

These multimedia outlets are designed to meet the requirements of a multimedia installation, with a mix of FM, TV, modem and Set Top box, where high isolation between ports is critical for optimal performance.

The outlets are available in terminated and loop-through designs, and for each of these as standard and diplex versions.

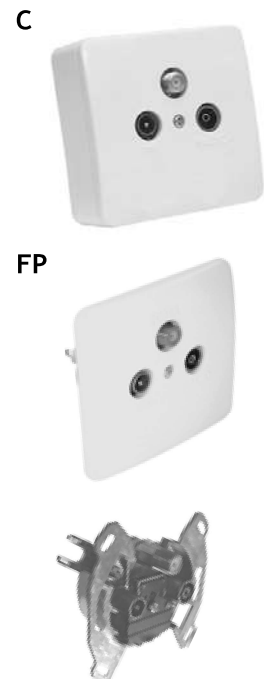
The choice between a standard or a diplex data outlet means that network performance can be optimized according to return path attenuation. Diplex is used in low tolerance networks.

Each outlet is available with a front plate and surface mounting frame (C), with a front plate only (FP) or without any enclosure.

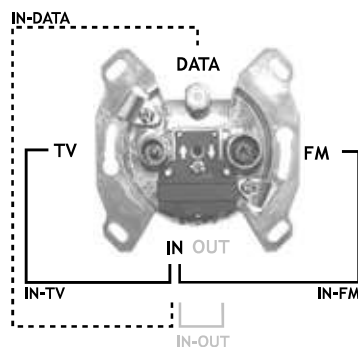
Galvanic isolated multimedia outlets are also available. These provide optimal isolation of potential differences between the network and the subscriber's equipment. These too are available in terminated and loop-through designs (see page 9).

All outlets are assigned colour codes on the IEC constructions, in order to identify the type of outlet on the front (See page 23 for more information regarding these codes).

Explanation to "version": Std = Standard (no diplex), Dip = Diplex filter, TM = Terminated, LT = Loop-through



## Insertion loss



## Insertion loss

A signal is applied to the IN connector and the output is measured on the OUT, TV, FM and DATA connectors.

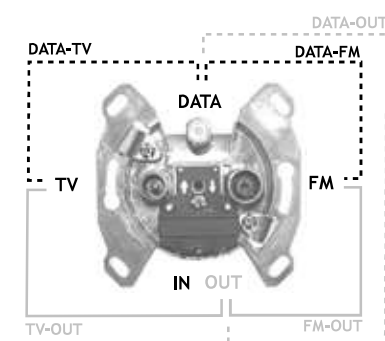
## Isolation

A signal is applied to a connector, for example TV, and the output is measured on other connectors, for example FM, DATA and OUT.

## Return loss

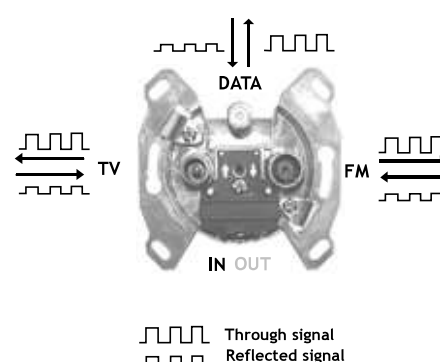
The fraction of the incoming signal that is reflected from this port on the outlet.

## Isolation



----- Only on multimedia outlets  
 ————— Only on unterminated loop-through outlets:

## Return loss



Type *	MM4-DABX-C	MM4-65X-C	MM7-65X-C	MM4-65DX-C	MM10-65DX-C
Item no.	52600	52605	52615	52610	52625
Version	Std, TM	Std, TM	Std, TM	Dip, TM	Dip, TM
<b>DATA</b>					
Frequency range (MHz)	5-1000	5-1000	5-1000	5-65 / 188-1000	5-65 / 188-1000
Insertion loss reverse (dB)	3,5	3,5	7,0	0,8	0,8
Insertion loss forward (dB)	3,5	3,5	7,0	4,5	10,0
Return loss** EN50083-4	Cat. B	Cat. B	Cat. B	Cat. B	Cat. B
Isolation to TV (dB) 5-65 MHz	> 55 (5-30 MHz)	> 50	> 50	> 45	> 45
Isolation to TV (dB) 118-1000 MHz	> 22 (47-862 MHz)	> 22	> 22	> 22	> 22
Connector	F-Female	F-Female	F-Female	F-Female	F-Female
<b>TV</b>					
Frequency range (MHz)	47-1000	118-1000	118-1000	118-1000	118-1000
Insertion loss IN-TV (dB)	4,5	4,5	2,5	4,5	2,0
Return loss** EN50083-4	Cat. C	Cat. C	Cat. C	Cat. C	Cat. C
Connector	IEC-Male	IEC-Male	IEC-Male	IEC-Male	IEC-Male
<b>FM</b>					
Frequency range (MHz)	87,5-108	87,5-108	87,5-108	87,5-108	87,5-108
Insertion loss IN-FM (dB)	5,0	5,0	4,0	4,5	2,5
Connector	IEC-Female	IEC-Female	IEC-Female	IEC-Female	IEC-Female

Type	MM10-65X-C	MM13-65X-C	MM16-65X-C	MM10-65-DPTX-C
Item no.	52620	52645	52650	52635
Version	Std, LT	Std, LT	Std, LT	Dip, LT
<b>DATA</b>				
Frequency range (MHz)	5-1000	5-1000	5-1000	5-65 / 188-1000
Insertion loss reverse (dB)	10	13	16	5
Insertion loss forward (dB)	10	13	16	10
Return loss** EN50083-4	Cat. B	Cat. B	Cat. B	Cat. B
Isolation to OUT (dB)	25	25	25	25
Isolation to TV (dB) 5-65 MHz	> 55	> 50	> 50	> 45
Isolation to TV (dB) 118-1000 MHz	> 22	> 22	> 22	> 22
Connector	F-Female	F-Female	F-Female	F-Female
<b>TV</b>				
Frequency range (MHz)	118-1000	118-1000	118-1000	118-1000
Insertion loss IN-TV (dB)	10	13	16	9,5
Return loss** EN50083-4	Cat. C	Cat. C	Cat. C	Cat. C
Isolation to OUT (dB)	25	25	25	25
Connector	IEC-Male	IEC-Male	IEC-Male	IEC-Male
<b>FM</b>				
Frequency range (MHz)	87,5-108	87,5-108	87,5-108	87,5-108
Insertion loss IN-FM (dB)	10	13	16	10,5
Connector	IEC-Female	IEC-Female	IEC-Female	IEC-Female
<b>IN &amp; OUT</b>				
Frequency range (MHz)	5-1000	5-1000	5-1000	5-1000
Insertion loss IN-OUT (dB)	2,5	2,0	1,7	4,5 (±1)
Return loss** EN50083-4	Cat. B	Cat. B	Cat. B	Cat. B

Dimension (H 82 x W 82 x D 30 mm)  
Back box only. Faceplate adds 8 mm to depth to overall 38 mm.

\* Type suffix defines product package:

C - complete housing (front and back), for example MM10-65X-C.  
FP - front plate only, for example MM10-65X-FP.  
No suffix - no front or back, for example MM10-65X.  
Each available in minimum order quantity of 10 units.

+ The data connection in the MM4-DABX-C outlet can be used to receive DAB signals.

\*\* According to CENELEC:

A: 5-40 MHz ≥ 22 dB, min. 14 dB @ 40-1750 MHz ÷ 1,5/oct.  
B: 5-40 MHz ≥ 18 dB, min. 10 dB @ 40-1750 MHz ÷ 1,5/oct.  
C: 5-40 MHz ≥ 14 dB, min. 10 dB @ 40-1750 MHz ÷ 1,5/oct.  
D: 5-1750 MHz ≥ 10 dB