

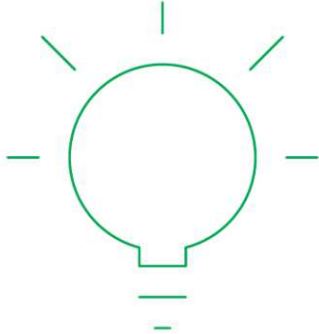


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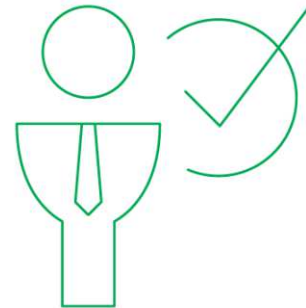
# Multimedia Catalogue Australian Supplementary Edition 2019

smartexperience

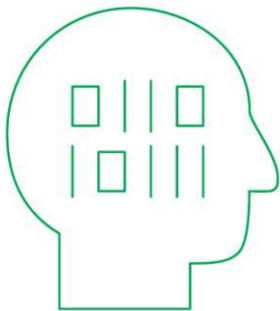
# Ikusi Multimedia: Innovative technology for video & TV signal



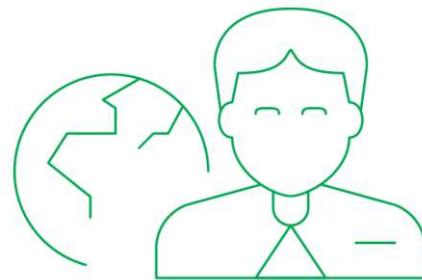
We are **experts in innovative and high technology solutions** for the reception, processing and distribution of television channels and video, aimed at operators, installers and integrators and to the professional electronic equipment distribution sector



Our clients' targets become our own and we establish long term relations with these clients, with solid foundations, based on the creation of a common area and a strong **commitment to sharing the same vision**.



To turn our proposal into reality, we have **a highly qualified professional team** (technical, sales and R&D services) that we place at our clients' service.



**Ikusi Multimedia forms part of Ikusi**, a technological company specialising in technological solutions and applications that give greater intelligence and efficiency to areas such as security in infrastructures, road traffic and railway mobility, airports and cities: it designs, develops and manufactures products aimed at multimedia and remote control environments and it is a renowned integrator for telecommunications and IT networks.

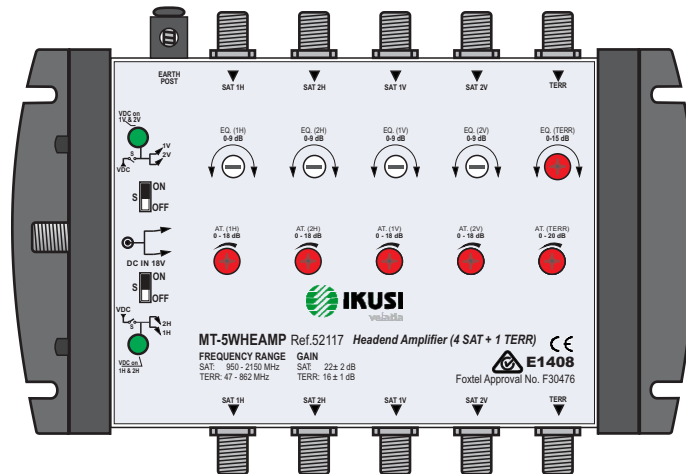
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## FTA & SAT-IF DISTRIBUTION EQUIPMENT

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## Model: MT-5WHEAMP



Headend Amplifier

## Headend Amplifier for 5-wire system

### Features

- Low cost high performance, proven technology for SMATV distribution.
- Amplification of 4 SAT-IF & 1 TERR signal for 5 wire distribution systems.
- Active SAT & TERR. Continuous attenuation & equalization adjustments.
- Local powering (+18VDC) using PS1816DC or PS183ADC.
- The +18VDC voltage is connected directly to SAT 1H and SAT 2H inputs and can be switched to SAT 1H & SAT 2H outputs (LED indicator).
- 13VDC can be switched to SAT 1V & SAT 2V inputs to power vertical polarity of the LNB (LED indicator).
- Sheet metal housing. Indoor mounting. Wall fixing. Earthing terminal.
- Foxtel Approved F30476.

## Specifications

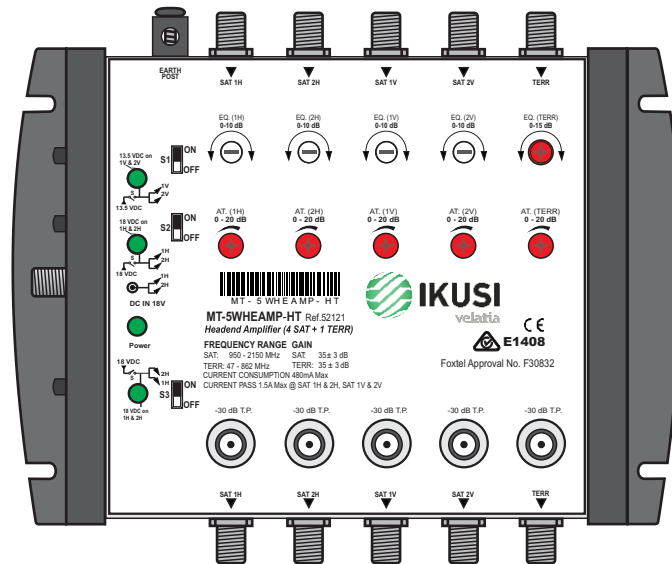
Headend Amplifier

Model			MT-5WHEAMP
Reference			52117
Powering Mode			DC (Local)
Line inputs			4 SAT + 1 TERR
Line Outputs			4 SAT + 1 TERR
Frequency	SAT	MHz	950 - 2150
	TERR	MHz	47 - 862
Gain	SAT	dB	22 (+/- 2)
	TERR	dB	16 (+/- 1)
Variable attenuation	SAT	dB	0 - 18
	TERR	dB	0 - 20
Variable equalization	SAT	dB	0 - 9
	TERR	dB	0 - 15
Isolation	SAT - SAT	dB	>45
	SAT - TERR	dB	> 35
Noise figure	SAT	dB	< 6
	TERR	dB	< 11
Input & output return loss		dB	> 10
Satellite output level (-25 dB IM3 AS/NZS 1367, full channel loading)		dBuV	104
Terrestrial output level (-30dB IM3 AS/NZS 1367, full channel loading)		dBuV	94
Power consumption, amplifier only			+18Vdc / 300mA max.
Feed through of +18Vdc 1H & 2H inputs		mA	260
Switchable +13Vdc to 1V & 2V inputs		mA	260
Feed through of 18Vdc to 1H & 2H outputs		A	2A Switchable
Max total feed through		A	2A Switchable
Input & output connectors			F-female
DC connector type			F-female
Dimensions L x W x H		mm	182 x 125 x 54

### Optional Accessories:

MT-DCFTRM (F Type 75Ω DC isolated terminator), MT-DCFBLOCK (F Type DC Blocker) MT-QFMFMC (F Type Quick connect)

## Model: MT-5WHEAMP-HT \*



## Headend Amplifier for 5-wire system

### Features

- Low cost high performance, proven technology for SMATV distribution.
- Amplification of 4 SAT-IF Polarizations & 1 TERR signal with continuous attenuation & equalisation adjustment for compensating distribution losses for 5 wire distribution systems.
- Higher input range up to 85dBuV.
- Includes -30 dB test points at all output ports.
- 35dB gain on SAT & TERR ports.
- Active SAT & TERR. with local powering +18 VDC using PS183ADC.
- LED indicator for Power only.
- The +18 VDC is user switchable (S2 & S3) for input and outputs of SAT 1H & SAT 2H.
- LED indicators for user switchable +18VDC.
- Additionally, an internally generated +13.5 VDC can be switched (S1) on (LED indicator) to the SAT 1V & SAT 2V inputs (to power the vertical polarity of the LNB).
- Sheet metal housing with Indoor mounting, wall fixing, & earthing terminal.
- Foxtel Approved F30832.

## Specifications

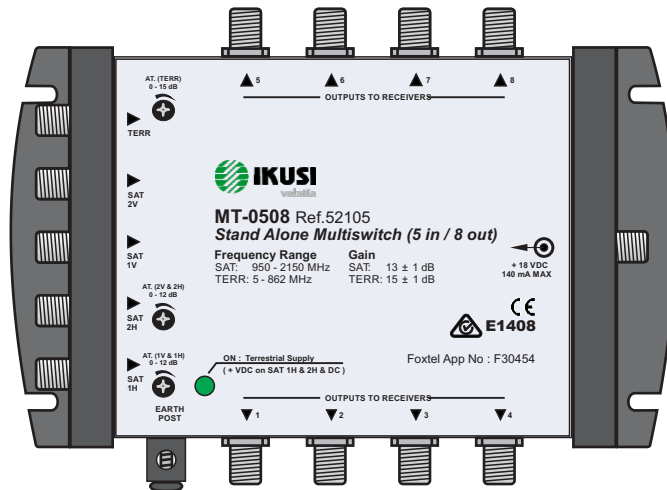
### Headend Amplifier

Model				MT-5WHEAMP-HT
Reference				52121
Powering Mode				DC (Local)
Line inputs (4x SAT= 1V, 1H, 2V 2H)				4 SAT + 1 TERR +1 DC IN 18 VDC
Line Outputs (4x SAT= 1V, 1H, 2V 2H)				4 SAT + 1 TERR +1 DC
Line Outputs Test Points (-30 dB) (4x SAT= 1V, 1H, 2V 2H)				4 SAT + 1 TERR +1 DC
Frequency	SAT		Mhz	950 - 2150
	TERR		MHz	47 - 862
Gain	SAT		dB	35 ± 3
	TERR		dB	35 ± 3
	TEST POINT		dB	5 ± 3
Gain adjustment	SAT		dB	20 ± 2
	TERR		dB	20 ± 2
Slope adjustment	SAT		dB	0 ~ 10
	TERR		dB	0 ~ 15
Isolation	SAT - SAT		dB	≥30
	TERR - SAT		dB	≥30
	SAT - TERR		dB	≥30
Return Loss	Input	SAT	dB	≥ 17
		TERR	dB	≥ 12
	Output	SAT	dB	≥ 11
		TERR	dB	≥15
	Test Point	SAT	dB	≥16
		TERR	dB	≥17
Noise figure	SAT		dB	≤12
	TERR		dB	≤10
Test Points at outputs			dB	-30 ± 3 dB
Max Output Level	SAT IMA3 -35dB @ EN50083-3		dBuV	≥105
	TERR IMA3 -60dB @ EN50083-5		dBuV	≥118
Power Pass (1.5A Max)	H Lines	18.0 ± 0.5	VDC	H input Lines (user switchable)
				H Output Lines (user switchable)
	V Lines	13.5 ± 0.5	VDC	V input Lines (user switchable)
Product Consumption (18VDC)			mA	480 Max
External switch mode power supply (18 VDC)			VDC	Use PS183ADC
Input / Output connectors & DC connector			F Type	F-female
Dimensions L x W x H (unit dimensions not including cable)			mm	203 x 153 x 61
Weight			grams	635

#### Optional Accessories:

MT-DCFTRM (F Type 75 Ohm DC isolated terminator), MT-DCFBLOCK (F Type DC Blocker)  
 MT-QFMFMC (F Type Quick connect)

**Model: MT-0508**



## Stand alone Multiswitches for 5-wire system

### Features

- Low cost high performance, proven technology for SMATV distribution.
- Stand alone Multiswitches for 5-wire system.
- Distribution of 4 satellite - IF polarizations and 1 terrestrial signal to 8, 12 ,16, 24, 32 users of satellite systems.
- Active satellite & terrestrial with continuous gain adjustments.
- Satellite path supplied from user receivers. IF polarization switching by voltage/tone.
- Terrestrial path supplied from separate DC input or from power on the SAT 1H or 2H inputs with LED indicator.
- Sheet metal housing, indoor mounting, wall fixing.
- Foxtel Approved F30454.



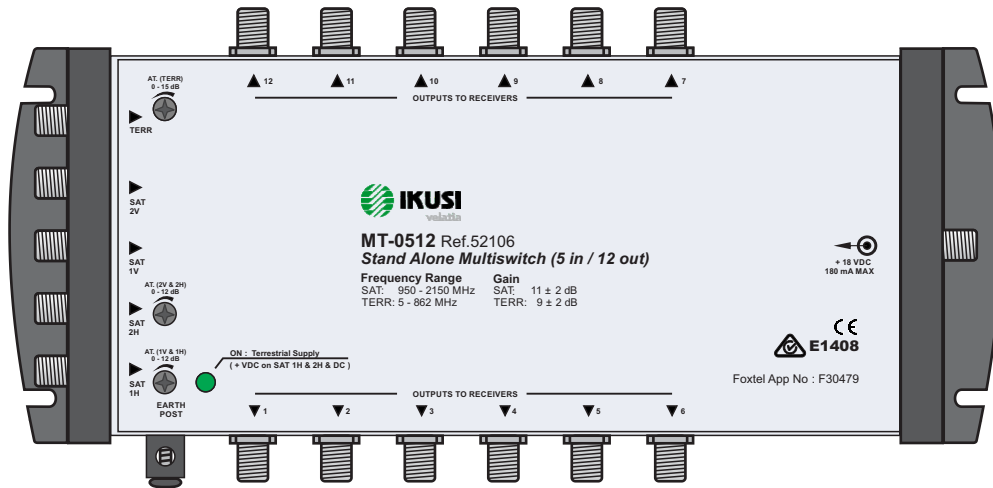
## Specifications

Stand Alone Multiswitches

Model			MT-0508	MT-0512	MT-0516	MT-0524	MT-0532
Reference			52105	52106	52107	52118	52119
Number of satellite inputs			4	4	4	4	4
Number of terrestrial input			1	1	1	1	1
Number of outputs (users)			8	12	16	24	32
SAT frequency Band		MHz	950 - 2150	950 - 2150	950 - 2150	950 - 2150	950 - 2150
TERR frequency Band		MHz	5 - 862	5 - 862	5 - 862	47 - 862	47 - 862
Gain	SAT	dB	13 (±1)	11 (±1)	11 (±2)	8 (±1)	7 (±1)
	TERR	dB	15 (±1)	9 (±1)	10 (±2)	8 (±1)	7 (±1)
Variable Attenuation	SAT 1V & 1H	dB	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
	SAT 2V & 2H	dB	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
	TERR	dB	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15
SAT output level (-25dB IM3 notch test IM3 AS/NZS 1367)		dBuV	≥ 98	≥ 99	≥ 99	≥ 95	≥ 95
Terr output level (-30dB IM3 AS/NZS 1367)		dBuV	≥ 98	≥ 93	≥ 93	≥ 88	≥ 85
Satellite input isolation		dB	≥ 30	≥ 30	≥ 30	≥ 30	≥ 30
Output isolation		dB	≥ 25	≥ 25	≥ 25	≥ 23	≥ 23
Terrestrial to Satellite isolation		dB	≥ 25	≥ 25	≥ 25	≥ 30	≥ 30
Input / Output return loss		dB	≥ 10	≥ 10	≥ 10	≥ 10	≥ 10
Switching by 13/18 V and 0/22 kHz			Yes	Yes	Yes	Yes	Yes
Max supply current from users' receivers		mA	200	200	200	200	200
Power requirements for TERR path (*)			18V / 140mA	18V / 140mA	18V / 140mA	18V / 180mA	18V / 180mA
Input and Output RF connectors			F-female	F-female	F-female	F-female	F-female
Terrestrial supply DC connector			F-female	F-female	F-female	F-female	F-female
Dimensions L x W x H		mm	182 x 125 x 54	270 x 125 x 54	270 x 125 x 54	360 x 125 x 54	470 x 125 x 54

For further information on applications, refer to TechNote 15.

**Model: MT-0512**



**Multiswitch**

## ***Stand alone Multiswitches for 5-wire system***

### **Features**

- Low cost high performance, proven technology for SMATV distribution,
- Stand alone Multiswitches for 5-wire system.
- Distribution of 4 satellite - IF polarizations and 1 terrestrial signal to 8, 12, 16, 24, 32 users of satellite systems,
- Active satellite & terrestrial with continuous gain adjustments.
- Satellite path supplied from user receivers. IF polarization switching by voltage/tone.
- Terrestrial path supplied from separate DC input or from power on the SAT 1H or 2H inputs with LED indicator.
- Sheet metal housing, indoor mounting, wall fixing.
- Foxtel Approved F30479.

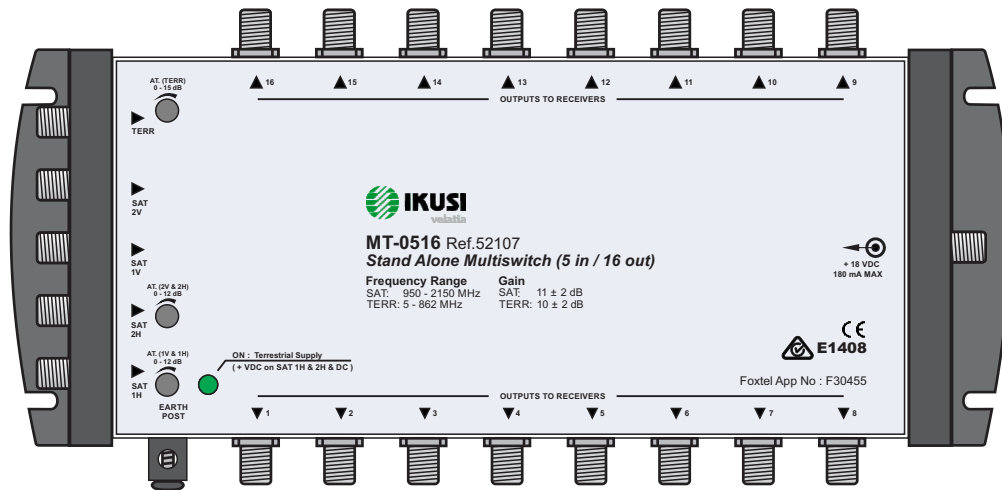
## Specifications

Stand Alone Multiswitches

Model			MT-0508	MT-0512	MT-0516	MT-0524	MT-0532
Reference			52105	52106	52107	52118	52119
Number of satellite inputs			4	4	4	4	4
Number of terrestrial input			1	1	1	1	1
Number of outputs (users)			8	12	16	24	32
SAT frequency Band		MHz	950 - 2150	950 - 2150	950 - 2150	950 - 2150	950 - 2150
TERR frequency Band		MHz	5 - 862	5 - 862	5 - 862	47 - 862	47 - 862
Gain	SAT	dB	13 (±1)	11 (±1)	11 (±2)	8 (±1)	7 (±1)
	TERR	dB	15 (±1)	9 (±1)	10 (±2)	8 (±1)	7 (±1)
Variable Attenuation	SAT 1V & 1H	dB	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
	SAT 2V & 2H	dB	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
	TERR	dB	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15
SAT output level (-25dB IM3 notch test IM3 AS/NZS 1367)		dBuV	≥ 98	≥ 99	≥ 99	≥ 95	≥ 95
Terr output level (-30dB IM3 AS/NZS 1367)		dBuV	≥ 98	≥ 93	≥ 93	≥ 88	≥ 85
Satellite input isolation		dB	≥ 30	≥ 30	≥ 30	≥ 30	≥ 30
Output isolation		dB	≥ 25	≥ 25	≥ 25	≥ 23	≥ 23
Terrestrial to Satellite isolation		dB	≥ 25	≥ 25	≥ 25	≥ 30	≥ 30
Input / Output return loss		dB	≥ 10	≥ 10	≥ 10	≥ 10	≥ 10
Switching by 13/18 V and 0/22 kHz			Yes	Yes	Yes	Yes	Yes
Max supply current from users' receivers		mA	200	200	200	200	200
Power requirements for TERR path (*)			18V / 140mA	18V / 140mA	18V / 140mA	18V / 180mA	18V / 180mA
Input and Output RF connectors			F-female	F-female	F-female	F-female	F-female
Terrestrial supply DC connector			F-female	F-female	F-female	F-female	F-female
Dimensions L x W x H		mm	182 x 125 x 54	270 x 125 x 54	270 x 125 x 54	360 x 125 x 54	470 x 125 x 54

For further information on applications, refer to TechNote 15.

**Model: MT-0516**



**Multiswitch**

## ***Stand alone Multiswitches for 5-wire system***

### **Features**

- Low cost high performance, proven technology for SMATV distribution.
- Stand alone Multiswitches for 5-wire system.
- Distribution of 4 satellite - IF polarizations and 1 terrestrial signal to 8, 12, 16, 24, 32 users of satellite systems.
- Active satellite & terrestrial with continuous gain adjustments.
- Satellite path supplied from user receivers. IF polarization switching by voltage/tone.
- Terrestrial path supplied from separate DC input or from power on the SAT 1H or 2H inputs with LED indicator.
- Sheet metal housing, indoor mounting, wall fixing.
- Foxtel Approved F30455.

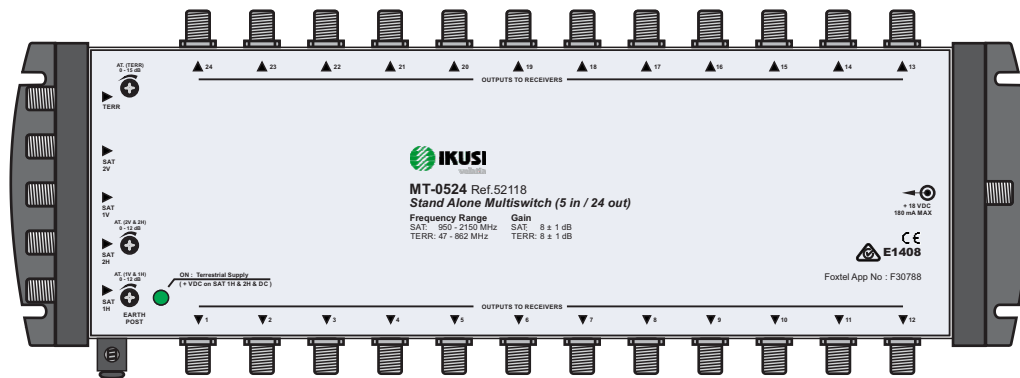
## Specifications

Stand Alone Multiswitches

Model			MT-0508	MT-0512	MT-0516	MT-0524	MT-0532
Reference			52105	52106	52107	52118	52119
Number of satellite inputs			4	4	4	4	4
Number of terrestrial input			1	1	1	1	1
Number of outputs (users)			8	12	16	24	32
SAT frequency Band		MHz	950 - 2150	950 - 2150	950 - 2150	950 - 2150	950 - 2150
TERR frequency Band		MHz	5 - 862	5 - 862	5 - 862	47 - 862	47 - 862
Gain	SAT	dB	13 (±1)	11 (±1)	11 (±2)	8 (±1)	7 (±1)
	TERR	dB	15 (±1)	9 (±1)	10 (±2)	8 (±1)	7 (±1)
Variable Attenuation	SAT 1V & 1H	dB	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
	SAT 2V & 2H	dB	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
	TERR	dB	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15
SAT output level (-25dB IM3 notch test IM3 AS/NZS 1367)		dBuV	≥ 98	≥ 99	≥ 99	≥ 95	≥ 95
Terr output level (-30dB IM3 AS/NZS 1367)		dBuV	≥ 98	≥ 93	≥ 93	≥ 88	≥ 85
Satellite input isolation		dB	≥ 30	≥ 30	≥ 30	≥ 30	≥ 30
Output isolation		dB	≥ 25	≥ 25	≥ 25	≥ 23	≥ 23
Terrestrial to Satellite isolation		dB	≥ 25	≥ 25	≥ 25	≥ 30	≥ 30
Input / Output return loss		dB	≥ 10	≥ 10	≥ 10	≥ 10	≥ 10
Switching by 13/18 V and 0/22 kHz			Yes	Yes	Yes	Yes	Yes
Max supply current from users' receivers		mA	200	200	200	200	200
Power requirements for TERR path (*)			18V / 140mA	18V / 140mA	18V / 140mA	18V / 180mA	18V / 180mA
Input and Output RF connectors			F-female	F-female	F-female	F-female	F-female
Terrestrial supply DC connector			F-female	F-female	F-female	F-female	F-female
Dimensions L x W x H		mm	182 x 125 x 54	270 x 125 x 54	270 x 125 x 54	360 x 125 x 54	470 x 125 x 54

For further information on applications, refer to TechNote 15.

**Model: MT-0524**



**Multiswitch**

## ***Stand alone Multiswitches for 5-wire system***

### **Features**

- Low cost high performance, proven technology for SMATV distribution.
- Stand alone Multiswitches for 5-wire system.
- Distribution of 4 satellite - IF polarizations and 1 terrestrial signal to 8, 12, 16, 24, 32 users of satellite systems.
- Active satellite & terrestrial with continuous gain adjustments.
- Satellite path supplied from user receivers. IF polarization switching by voltage/tone.
- Terrestrial path supplied from separate DC input or from power on the SAT 1H or 2H inputs with LED indicator.
- Sheet metal housing, indoor mounting, wall fixing.
- Foxtel Approved F30788.

## Specifications

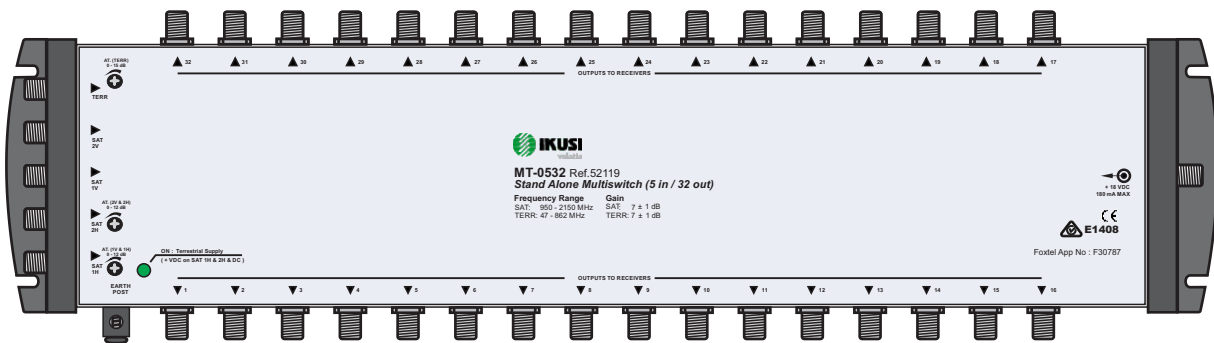
Stand Alone Multiswitches

Model			MT-0508	MT-0512	MT-0516	MT-0524	MT-0532
Reference			52105	52106	52107	52118	52119
Number of satellite inputs			4	4	4	4	4
Number of terrestrial input			1	1	1	1	1
Number of outputs (users)			8	12	16	24	32
SAT frequency Band		MHz	950 - 2150	950 - 2150	950 - 2150	950 - 2150	950 - 2150
TERR frequency Band		MHz	5 - 862	5 - 862	5 - 862	47 - 862	47 - 862
Gain	SAT	dB	13 (±1)	11 (±1)	11 (±2)	8 (±1)	7 (±1)
	TERR	dB	15 (±1)	9 (±1)	10 (±2)	8 (±1)	7 (±1)
Variable Attenuation	SAT 1V & 1H	dB	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
	SAT 2V & 2H	dB	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
	TERR	dB	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15
SAT output level (-25dB IM3 notch test IM3 AS/NZS 1367)		dBuV	≥ 98	≥ 99	≥ 99	≥ 95	≥ 95
Terr output level (-30dB IM3 AS/NZS 1367)		dBuV	≥ 98	≥ 93	≥ 93	≥ 88	≥ 85
Satellite input isolation		dB	≥ 30	≥ 30	≥ 30	≥ 30	≥ 30
Output isolation		dB	≥ 25	≥ 25	≥ 25	≥ 23	≥ 23
Terrestrial to Satellite isolation		dB	≥ 25	≥ 25	≥ 25	≥ 30	≥ 30
Input / Output return loss		dB	≥ 10	≥ 10	≥ 10	≥ 10	≥ 10
Switching by 13/18 V and 0/22 kHz			Yes	Yes	Yes	Yes	Yes
Max supply current from users' receivers		mA	200	200	200	200	200
Power requirements for TERR path (*)			18V / 140mA	18V / 140mA	18V / 140mA	18V / 180mA	18V / 180mA
Input and Output RF connectors			F-female	F-female	F-female	F-female	F-female
Terrestrial supply DC connector			F-female	F-female	F-female	F-female	F-female
Dimensions L x W x H		mm	182 x 125 x 54	270 x 125 x 54	270 x 125 x 54	360 x 125 x 54	470 x 125 x 54

For further information on applications, refer to TechNote 15.

**Model: MT-0532**

**Multiswitch**



## ***Stand alone Multiswitches for 5-wire system***

### **Features**

- Low cost high performance, proven technology for SMATV distribution.
- Stand alone Multiswitches for 5-wire system.
- Distribution of 4 satellite - IF polarizations and 1 terrestrial signal to 8, 12, 16, 24, 32 users of satellite systems
- Active satellite & terrestrial with continuous gain adjustments.
- Satellite path supplied from user receivers. IF polarization switching by voltage/tone.
- Terrestrial path supplied from separate DC input or from power on the SAT 1H or 2H inputs with LED indicator.
- Sheet metal housing, indoor mounting, wall fixing.
- Foxtel Approved F30787.



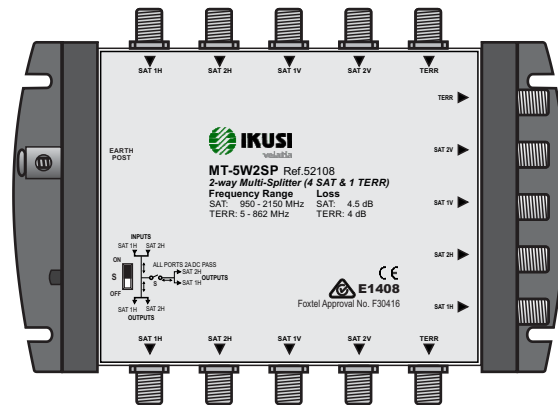
## Specifications

Stand Alone Multiswitches

Model			MT-0508	MT-0512	MT-0516	MT-0524	MT-0532
Reference			52105	52106	52107	52118	52119
Number of satellite inputs			4	4	4	4	4
Number of terrestrial input			1	1	1	1	1
Number of outputs (users)			8	12	16	24	32
SAT frequency Band		MHz	950 - 2150	950 - 2150	950 - 2150	950 - 2150	950 - 2150
TERR frequency Band		MHz	5 - 862	5 - 862	5 - 862	47 - 862	47 - 862
Gain	SAT	dB	13 (±1)	11 (±1)	11 (±2)	8 (±1)	7 (±1)
	TERR	dB	15 (±1)	9 (±1)	10 (±2)	8 (±1)	7 (±1)
Variable Attenuation	SAT 1V & 1H	dB	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
	SAT 2V & 2H	dB	0 - 12	0 - 12	0 - 12	0 - 12	0 - 12
	TERR	dB	0 - 15	0 - 15	0 - 15	0 - 15	0 - 15
SAT output level (-25dB IM3 notch test IM3 AS/NZS 1367)		dBuV	≥ 98	≥ 99	≥ 99	≥ 95	≥ 95
Terr output level (-30dB IM3 AS/NZS 1367)		dBuV	≥ 98	≥ 93	≥ 93	≥ 88	≥ 85
Satellite input isolation		dB	≥ 30	≥ 30	≥ 30	≥ 30	≥ 30
Output isolation		dB	≥ 25	≥ 25	≥ 25	≥ 23	≥ 23
Terrestrial to Satellite isolation		dB	≥ 25	≥ 25	≥ 25	≥ 30	≥ 30
Input / Output return loss		dB	≥ 10	≥ 10	≥ 10	≥ 10	≥ 10
Switching by 13/18 V and 0/22 kHz			Yes	Yes	Yes	Yes	Yes
Max supply current from users' receivers		mA	200	200	200	200	200
Power requirements for TERR path (*)			18V / 140mA	18V / 140mA	18V / 140mA	18V / 180mA	18V / 180mA
Input and Output RF connectors			F-female	F-female	F-female	F-female	F-female
Terrestrial supply DC connector			F-female	F-female	F-female	F-female	F-female
Dimensions L x W x H		mm	182 x 125 x 54	270 x 125 x 54	270 x 125 x 54	360 x 125 x 54	470 x 125 x 54

For further information on applications, refer to TechNote 15.

**Model: MT-5W2SP**



**5-wire Splitter**

## 2-way 5-wire Splitter

### Features

- Low cost high performance, proven technology for SMATV distribution.
- 2-way 5-wire Splitter for infrastructure of 5-wire system.
- Distribution of 4 satellite - IF polarizations and 1 terrestrial via trunk backbone.
- In built slope response for satellite frequencies.
- DC passing between satellite inputs and outputs.
- Sheet metal housing, indoor mounting, wall fixing.
- Foxtel Approved F30416.

## Specifications

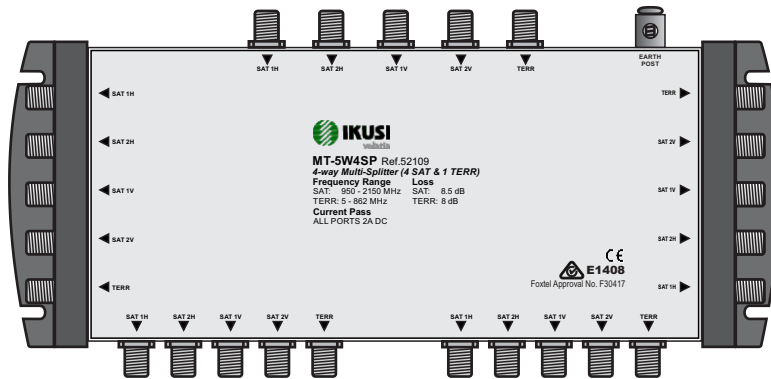
5-wire Splitter

Model			MT-5W2SP	MT-5W4SP
Reference			52108	52109
Inputs			4 SAT & 1 TERR	4 SAT & 1 TERR
Outputs			(2x) 4 SAT & 1 TERR	(4x) 4 SAT & 1 TERR
FrequencyRange	SAT	MHz	950-2150	950-2150
	TERR	MHz	5-862	5-862
Insertion Loss	SAT	dB	4.5	8.5
	TERR	dB	10	15
Isolation	SAT	dB	≥ 18	≥ 18
	TERR	dB	≥ 22	≥ 22
Rejection	TERR-SAT	dB	≥ 3	≥ 5
Return Loss	SAT	dB	≥ 12	≥ 10
	TERR	dB	≥ 20	≥ 16
DC pass on SAT H paths		A	2A max - Switchable on H outputs of one set of output ports only	2A max
Trunk and Tap connectors type			F-female	F-female
Dimensions L x W x H		mm	182 x 122 x 54	194 x 125 x 54

For further information on applications, refer to TechNote 23.

**Model: MT-5W4SP**

**5-wire Splitter**



## 4-way 5-wire Splitter

### Features

- Low cost high performance, proven technology for SMATV distribution.
- 4-way 5-wire Splitter for infrastructure of 5-wire system.
- Distribution of 4 satellite - IF polarizations and 1 terrestrial via trunk backbone.
- In built slope response for satellite frequencies.
- DC passing between satellite inputs and outputs.
- Sheet metal housing, indoor mounting, wall fixing.
- Foxtel Approved F30417

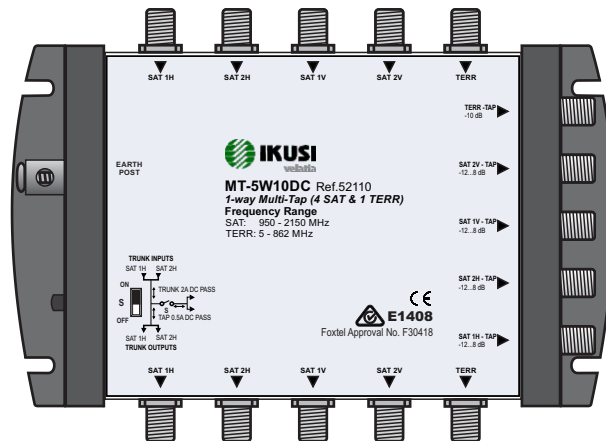
## Specifications

**5-wire Splitter**

Model			MT-5W2SP	MT-5W4SP
Reference			52108	52109
Inputs			4 SAT & 1 TERR	4 SAT & 1 TERR
Outputs			(2x) 4 SAT & 1 TERR	(4x) 4 SAT & 1 TERR
FrequencyRange	SAT	MHz	950-2150	950-2150
	TERR	MHz	5-862	5-862
Insertion Loss	SAT	dB	4.5	8.5
	TERR	dB	10	15
Isolation	SAT	dB	≥ 18	≥ 18
	TERR	dB	≥ 22	≥ 22
Rejection	TERR-SAT	dB	≥ 3	≥ 5
Return Loss	SAT	dB	≥ 12	≥ 10
	TERR	dB	≥ 20	≥ 16
DC pass on SAT H paths		A	2A max - Switchable on H outputs of one set of output ports only	2A max
Trunk and Tap connectors type			F-female	F-female
Dimensions L x W x H		mm	182 x 122 x 54	194 x 125 x 54

For further information on applications, refer to TechNote 23.

**Model: MT-5W10DC**



**1-way Multi-Taps**

## 1-way Multi-Taps for 5-wire system

### Features

- Low cost high performance, proven technology for SMATV distribution.
- 1-way Multi-Taps for infrastructure of 5-wire system.
- Distribution of 4 satellite - IF polarizations and 1 terrestrial via trunk backbone.
- In built slope response for satellite frequencies.
- DC passing between satellite inputs and outputs.
- Sheet metal housing, indoor mounting, wall fixing.
- Foxtel Approved F30418.

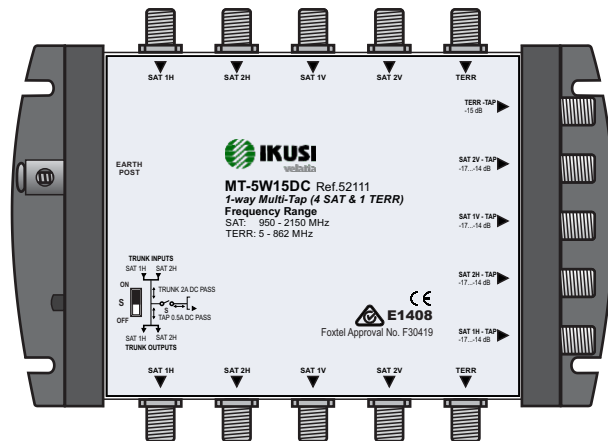
## Specifications

1-way Multi-Taps

Model			MT-5W10DC	MT-5W15DC	MT-5W20DC
Reference			52110	52111	52112
Trunk Inputs / Outputs			4 SAT & 1 TERR	4 SAT & 1 TERR	4 SAT & 1 TERR
Tap outputs			4 SAT & 1 TERR	4 SAT & 1 TERR	4 SAT & 1 TERR
FrequencyRange	SAT	MHz	950-2150	950-2150	950-2150
	TERR	MHz	5-862	5-862	5-862
Tap Loss	SAT	dB	12 to 8 ( $\pm 0.5$ ) 4 dB fixed slope	17 to 14 ( $\pm 0.5$ ) 3 dB fixed slope	22 to 19 ( $\pm 1$ ) 3 dB fixed slope
	TERR	dB	10	15	20
Trunk Loss	SAT	dB	1.5	1.0	1.0
	TERR	dB	1.5	1.0	1.0
Isolation	SAT	dB	$\geq 35$	$\geq 35$	$\geq 35$
Rejection	TERR-SAT	dB	$\geq 12$	$\geq 18$	$\geq 22$
Directivity	SAT	dB	$\geq 10$	$\geq 10$	$\geq 10$
	TERR	dB	$\geq 20$	$\geq 20$	$\geq 25$
Return Loss	SAT	dB	$\geq 10$	$\geq 10$	$\geq 10$
	TERR	dB	$\geq 16$	$\geq 13$	$\geq 13$
DC pass on SAT H trunk paths		A	2A max	2A max	2A max
DC pass on SAT H tap paths		A	0.5A max - switchable	0.5A max - switchable	0.5A max - switchable
Trunk and Tap connectors type			F-female	F-female	F-female
Dimensions L x W x H		mm	182 x 122 x 54	182 x 122 x 54	182 x 122 x 54

For further information on applications, refer to TechNote 23.

**Model: MT-5W15DC**



**1-way Multi-Taps**

## 1-way Multi-Taps for 5-wire system

### Features

- Low cost high performance, proven technology for SMATV distribution.
- 1-way Multi-Taps for infrastructure of 5-wire system.
- Distribution of 4 satellite - IF polarizations and 1 terrestrial via trunk backbone.
- In built slope response for satellite frequencies.
- DC passing between satellite inputs and outputs.
- Sheet metal housing, indoor mounting, wall fixing.
- Foxtel Approved F30419.



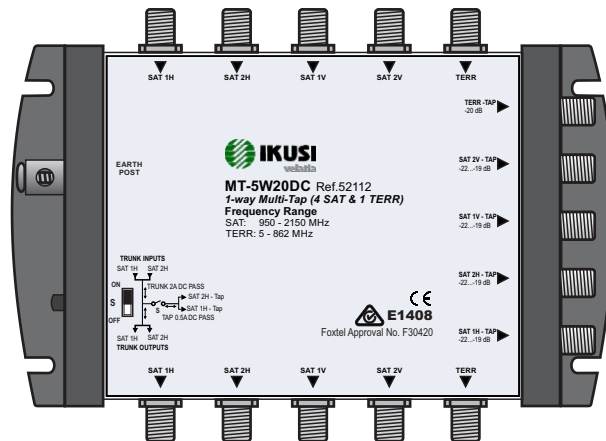
## Specifications

1-way Multi-Taps

Model			MT-5W10DC	MT-5W15DC	MT-5W20DC
Reference			52110	52111	52112
Trunk Inputs / Outputs			4 SAT & 1 TERR	4 SAT & 1 TERR	4 SAT & 1 TERR
Tap outputs			4 SAT & 1 TERR	4 SAT & 1 TERR	4 SAT & 1 TERR
FrequencyRange	SAT	MHz	950-2150	950-2150	950-2150
	TERR	MHz	5-862	5-862	5-862
Tap Loss	SAT	dB	12 to 8 ( $\pm 0.5$ ) 4 dB fixed slope	17 to 14 ( $\pm 0.5$ ) 3 dB fixed slope	22 to 19 ( $\pm 1$ ) 3 dB fixed slope
	TERR	dB	10	15	20
Trunk Loss	SAT	dB	1.5	1.0	1.0
	TERR	dB	1.5	1.0	1.0
Isolation	SAT	dB	$\geq 35$	$\geq 35$	$\geq 35$
Rejection	TERR-SAT	dB	$\geq 12$	$\geq 18$	$\geq 22$
Directivity	SAT	dB	$\geq 10$	$\geq 10$	$\geq 10$
	TERR	dB	$\geq 20$	$\geq 20$	$\geq 25$
Return Loss	SAT	dB	$\geq 10$	$\geq 10$	$\geq 10$
	TERR	dB	$\geq 16$	$\geq 13$	$\geq 13$
DC pass on SAT H trunk paths		A	2A max	2A max	2A max
DC pass on SAT H tap paths		A	0.5A max - switchable	0.5A max - switchable	0.5A max - switchable
Trunk and Tap connectors type			F-female	F-female	F-female
Dimensions L x W x H		mm	182 x 122 x 54	182 x 122 x 54	182 x 122 x 54

For further information on applications, refer to TechNote 23.

**Model: MT-5W20DC**



**1-way Multi-Taps**

## 1-way Multi-Taps for 5-wire system

### Features

- Low cost high performance, proven technology for SMATV distribution.
- 1-way Multi-Taps for infrastructure of 5-wire system.
- Distribution of 4 satellite - IF polarizations and 1 terrestrial via trunk backbone.
- In built slope response for satellite frequencies.
- DC passing between satellite inputs and outputs.
- Sheet metal housing, indoor mounting, wall fixing.
- Foxtel Approved F30420.

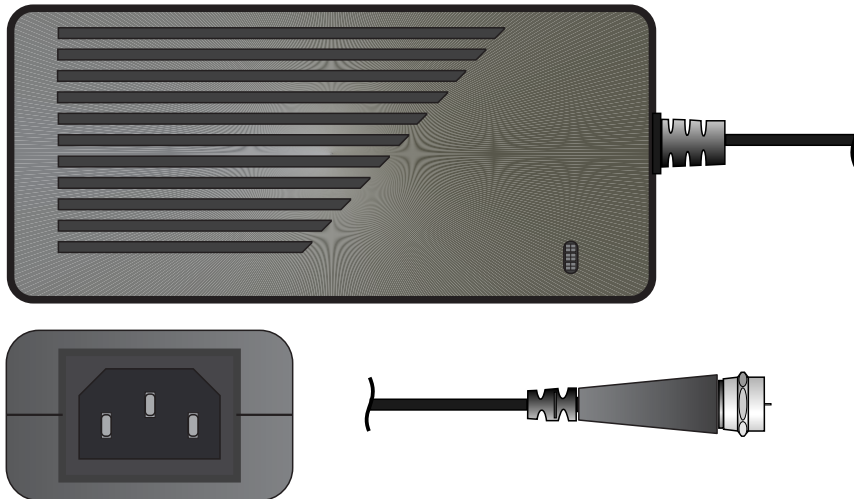
## Specifications

1-way Multi-Taps

Model			MT-5W10DC	MT-5W15DC	MT-5W20DC
Reference			52110	52111	52112
Trunk Inputs / Outputs			4 SAT & 1 TERR	4 SAT & 1 TERR	4 SAT & 1 TERR
Tap outputs			4 SAT & 1 TERR	4 SAT & 1 TERR	4 SAT & 1 TERR
FrequencyRange	SAT	MHz	950-2150	950-2150	950-2150
	TERR	MHz	5-862	5-862	5-862
Tap Loss	SAT	dB	12 to 8 ( $\pm 0.5$ ) 4 dB fixed slope	17 to 14 ( $\pm 0.5$ ) 3 dB fixed slope	22 to 19 ( $\pm 1$ ) 3 dB fixed slope
	TERR	dB	10	15	20
Trunk Loss	SAT	dB	1.5	1.0	1.0
	TERR	dB	1.5	1.0	1.0
Isolation	SAT	dB	$\geq 35$	$\geq 35$	$\geq 35$
Rejection	TERR-SAT	dB	$\geq 12$	$\geq 18$	$\geq 22$
Directivity	SAT	dB	$\geq 10$	$\geq 10$	$\geq 10$
	TERR	dB	$\geq 20$	$\geq 20$	$\geq 25$
Return Loss	SAT	dB	$\geq 10$	$\geq 10$	$\geq 10$
	TERR	dB	$\geq 16$	$\geq 13$	$\geq 13$
DC pass on SAT H trunk paths		A	2A max	2A max	2A max
DC pass on SAT H tap paths		A	0.5A max - switchable	0.5A max - switchable	0.5A max - switchable
Trunk and Tap connectors type			F-female	F-female	F-female
Dimensions L x W x H		mm	182 x 122 x 54	182 x 122 x 54	182 x 122 x 54

For further information on applications, refer to TechNote 23.

**Model: PS183ADC**



**Power Supply**

## **18 VDC 3.0A power supply**

### **Features**

- Power supply to suit 5 wire & active tap systems.
- IEC Power Cord.
- F Type male connector.
- Easy installation.
- Meets IEC 60169-24 F Type connector Standard.
- Mean Time Between Failures (MTBF) designed to have MTBF of 50,000 hours.
- Foxtel Approved F31079.

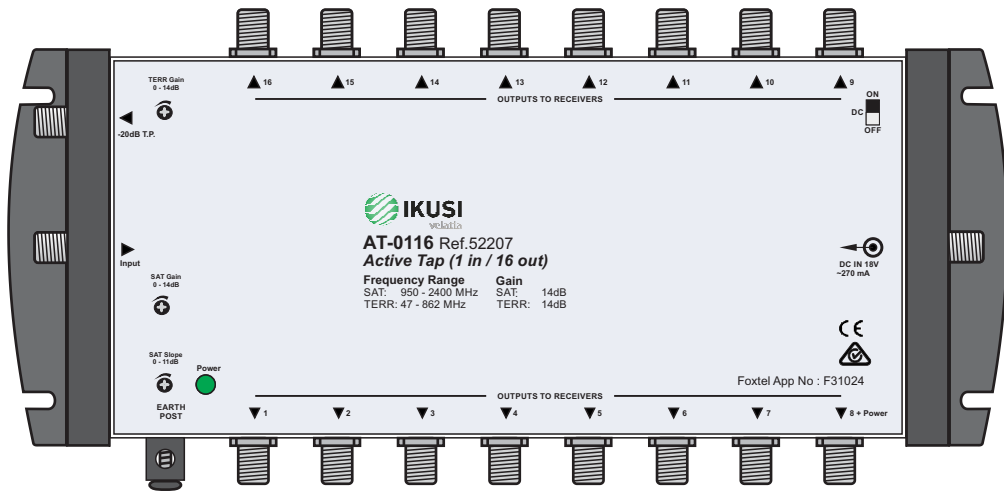
## Specifications

Power Supply

Model	PS183ADC			
Reference	50601			
<b>INPUT CHARACTERISTICS</b>				
AC Input Voltage (Min   Normal   Maximum)	90 Vac   100-240 Vac   264 Vac			
AC-Input Current - max when I/P rated Voltage & O/P rated load	1.5A Max			
AC Input Frequency (Min   Normal   Maximum)	-3 Hz   50/60Hz   +3Hz			
Peak In-rush Current (Max Cold start at 240Vac, with rated load @ 25°C)	Limited to 60A			
AC Leakage Current	0.25mA Max. @ 240Vac I/P			
Configuration	Standalone, IEC Power Connector			
<b>OUTPUT CHARACTERISTICS</b>				
Rated Output Power / Unloaded Standby Power	54W / 0.5W			
<b>Combined Load/Line Regulation</b>				
Voltage	Min: Load	Max Load	Load Regulation	Unloaded O/P Voltage
+18V	0A	3.0A	17.1V~18.9V	18.0V~18.9V
Average Efficiency, 115VAC & 230Vac input is:	≥87% output rated load is 25%,50%,75%,100% for 4 situations.			
Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope & output paralleled with a 0.1uF ceramic capacitor & a 47uF electrolytic capacitor. (Tested under the condition of rated input and rated output)	120mV p-p @18Vdc 3A			
Short Circuit & Over current Protection	The Output rail will recover, when short circuits are removed. The Output rail will hiccup, when excess currents are applied, and will auto recover when fault condition is removed.			
<b>ENVIRONMENTAL AND MECHANICAL CHARACTERISTICS</b>				
Operating Temperature	0°C to +40°C, Full Load, Normal Operation. (Workable under +55°C)			
Reliability	The power supply shall be designed and produced to have a mean time between failures (MTBF) of 50000 operating hours minimum conditions:100% load at 25°C, nominal input voltage. Standard: MIL-HDBK-217F.			
Dimensions L x W x D mm	120.0 x 54.5 x 32.0			
Weight (Power Supply Only)	222g +/-20g			
Packaged Weight (including IEC power cord)	520 g maximum			

**Model: AT-0116**

**Active Tap**



## 16 way Active Tap

### Features

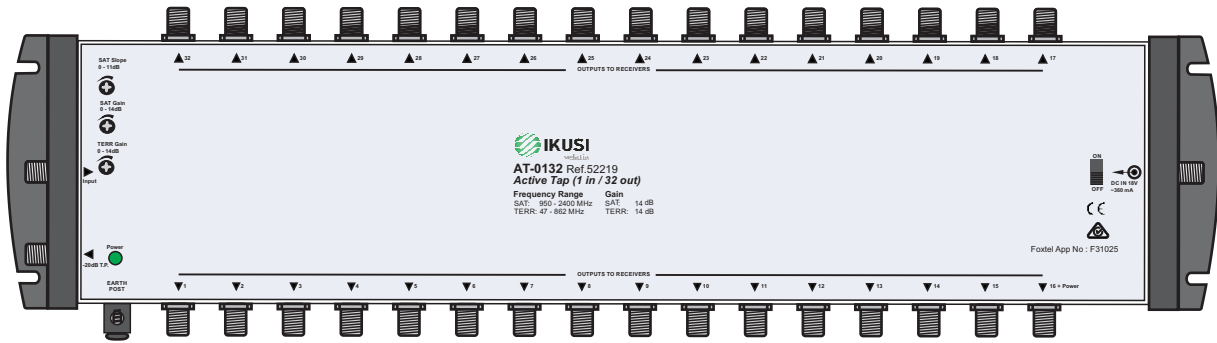
- Low cost high performance, proven technology for SMATV distribution.
- Stand alone Active Tap.
- Distribution of 1 satellite - multiple polarizations and 1 terrestrial signal.
- Active satellite & terrestrial with continuous gain adjustments.
- Satellite path supplied from user receivers.
- Terrestrial path supplied from separate DC input LED indicator.
- Sheet metal housing, indoor mounting, wall fixing.
- Foxtel Approved F31024.

## Specifications

Active Tap

Model			AT-0116	AT-0132
Reference			52207	52219
Number of satellite inputs			1	1
Number of terrestrial input			1	1
Number of outputs (users)			16	32
SAT frequency Band		MHz	950 - 2400	950 - 2400
TERR frequency Band		MHz	47 - 862	47 - 862
Insertion Gain (Fixed Slope 4dB)	SAT		dB	14
	TERR	47 MHz	dB	10
		862MHz	dB	14
Gain Adjustment	SAT		dB	14
	TERR		dB	14
Slope Adjustment		db	11	11
Out of Band Rejection (Sat-Terr)		dB	37	37
Output Isolation	TERR		dB	30
	SAT		dB	35
Return Loss	TERR		dB	12
	SAT		dB	12
TERR Max output (60dBuV IMA3 @ EN60728-5)		dBuV	96	96
SAT Max output (35dBuV IMA3 @ EN60728-3)		dBuV	97	96
Power Source 2A Maximum, DC Input & Port 8 (16 Way) and Port 16 (32 Way)		mA	12-18V / 270mA	12-18V / 360mA
Input and Output RF connectors			F-female	F-female
Supply DC connector			F-female	F-female
Dimensions L x W x H		mm	270 x 125 x 54	470 x 125 x 54
Weight		Kg	0.60	1.00

**Model: AT-0132**



**Active Tap**

## 32 way Active Tap

### Features

- Low cost high performance, proven technology for SMATV distribution.
- Stand alone Active Tap.
- Distribution of 1 satellite - multiple polarizations and 1 terrestrial signal.
- Active satellite & terrestrial with continuous gain adjustments.
- Satellite path supplied from user receivers.
- Terrestrial path supplied from separate DC input LED indicator.
- Sheet metal housing, indoor mounting, wall fixing.
- Foxtel Approved F31025.



## Specifications

Active Tap

Model			AT-0116	AT-0132
Reference			52207	52219
Number of satellite inputs			1	1
Number of terrestrial input			1	1
Number of outputs (users)			16	32
SAT frequency Band		MHz	950 - 2400	950 - 2400
TERR frequency Band		MHz	47 - 862	47 - 862
Insertion Gain (Fixed Slope 4dB)	SAT		dB	14
	TERR	47 MHz	dB	10
		862MHz	dB	14
Gain Adjustment	SAT		dB	14
	TERR		dB	14
Slope Adjustment		db	11	11
Out of Band Rejection (Sat-Terr)		dB	37	37
Output Isolation	TERR		dB	30
	SAT		dB	35
Return Loss	TERR		dB	12
	SAT		dB	12
TERR Max output (60dBuV IMA3 @ EN60728-5)		dBuV	96	96
SAT Max output (35dBuV IMA3 @ EN60728-3)		dBuV	97	96
Power Source 2A Maximum, DC Input & Port 8 (16 Way) and Port 16 (32 Way)		mA	12-18V / 270mA	12-18V / 360mA
Input and Output RF connectors			F-female	F-female
Supply DC connector			F-female	F-female
Dimensions L x W x H		mm	270 x 125 x 54	470 x 125 x 54
Weight		Kg	0.60	1.00

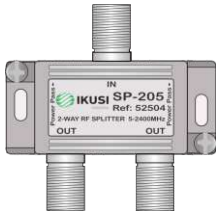


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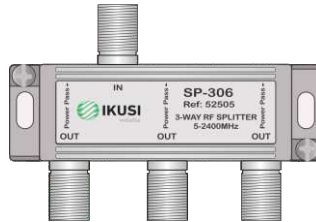
# SPLITTERS-SP Series

NEW

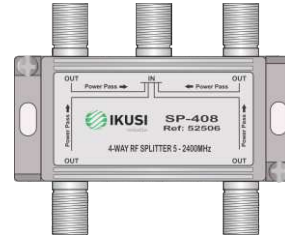
## Model: SP-Series



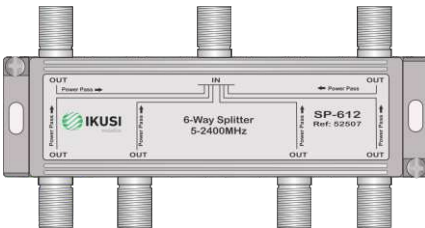
SP-205



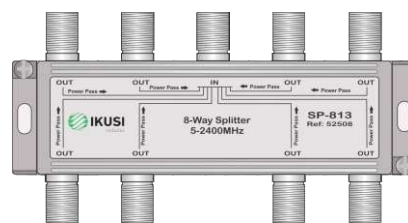
SP-306



SP-408



SP-612



SP-813

## 5 -2400 MHz Splitters

### Features

- Low cost high performance, proven technology for MATV distribution.
- 2, 3 , 4, 6, 8 way shielded RF Splitters .
- Frequency range 5-2400MHz.
- Wall Fixing, nickle plated zinc diecast housing (Mounting screws included).
- Grounding Facilities.
- All Ports F female connectors.
- Single directional DC Passing from all output ports to input port.
- Max +30Vdc. 1.0A DC passing.
- Foxtel approved.

Indoor Splitters

## Specifications

Indoor Splitters

Model			SP-205	SP-306	SP-408	SP-612	SP-813
Reference			52504	52505	52506	52507	52508
Foxtel Approval Number			F31032	F31033	F31034	F31035	F31016
Item	Frequency MHz	dB	Typical Values				
Insertion Loss IN-Out (Through Loss)	5 - 40 MHz	dB	4.2	7.5	8.5	11.5	12.0
	40 - 1000 MHz		4.8	7.5	9.2	11.8	12.5
	1000 - 1750 MHz		6.0	8.8	10.0	13.5	15.2
	1750 - 2050 MHz		6.5	10.5	11.2	16.5	18.0
	2050 - 2400 MHz		6.5	11.0	12.3	16.5	18.0
Mutual Isolation Out to Out (Port to Port)	5 - 40 MHz	dB	19	20	22	22	22
	40 - 1000 MHz		20	21	21	22	22
	1000 - 1750 MHz		20	21	21	22	22
	1750 - 2050 MHz		20	21	21	21	21
	2050 - 2400 MHz		20	20	20	21	21
Return Loss In / Out	5 - 40 MHz	dB	12	8	10	9	7.5
	40 - 1000 MHz		11	11	11	11.5	9
	1000 - 1750 MHz		9	11	11	12	13
	1750 - 2050 MHz		10	11	11	11	11
	2050 - 2400 MHz		10	11	10	11	11
Power Passing		A / Vdc	1A / 30Vdc				
Dimensions		L x W x H mm	53 x 50 x 17	74 x 50 x 17	74 x 60 x 15	117 x 60 x 17	117 x 60 x 17

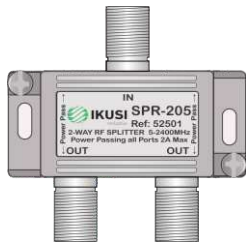


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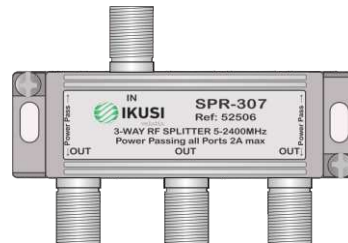
# SPLITTERS-SPR Series

**NEW**

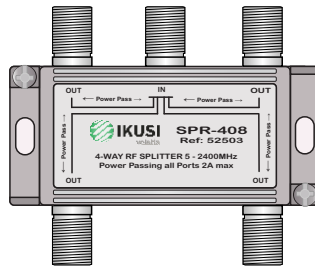
## Model: SPR-Series



SPR-205



SPR-307



SPR-408

**Indoor Splitters**

## 5 -2400 MHz Splitters Power Pass All Ports

### Features

- Low cost high performance, proven technology for MATV distribution.
- 2, 3, 4, way shielded RF Splitters .
- Frequency range 5-2400MHz.
- Wall Fixing, nickle plated zinc diecast housing (Mounting screws included).
- Grounding Facilities.
- All Ports F female connectors.
- DC Power Passing all ports.
- Max +30Vdc. 2.0A DC passing.
- Foxtel approved.

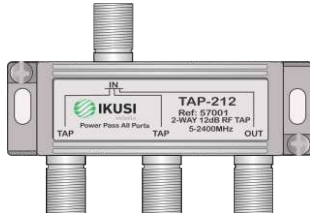
## Specifications

Indoor Splitters

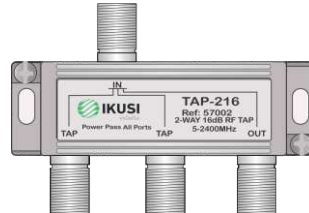
Model		SPR-205	SPR-307	SPR-408	
Reference		52501	52502	52503	
Foxtel Approval Number		F31029	F31030	F31031	
Item	Frequency MHz	dB	Typical Values		
Insertion Loss IN-Out (Through Loss)	5 - 40 MHz	dB	4.2	7.5	8.5
	40 - 1000 MHz		4.8	7.5	9.2
	1000 - 1750 MHz		6.0	8.8	10.0
	1750 - 2050 MHz		6.5	10.5	11.2
	2050 - 2400 MHz		6.5	11.0	12.3
Mutual Isolation Out to Out (Port to Port)	5 - 40 MHz	dB	19	20	22
	40 - 1000 MHz		20	21	21
	1000 - 1750 MHz		20	21	21
	1750 - 2050 MHz		20	21	21
	2050 - 2400 MHz		20	20	20
Return Loss In / Out	5 - 40 MHz	dB	12	8	10
	40 - 1000 MHz		11	11	11
	1000 - 1750 MHz		9	11	11
	1750 - 2050 MHz		10	11	11
	2050 - 2400 MHz		10	11	10
Power Passing		A / Vdc	1A / 30Vdc		
Dimensions		L x W x H mm	53 x 50 x 17	74 x 50 x 17	74 x 60 x 15

## Model: TAP-Series

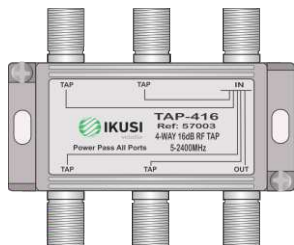
**Indoor Taps**



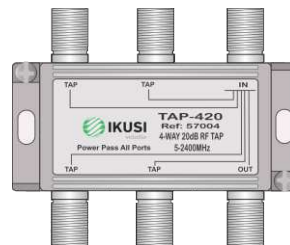
**TAP-212**



**TAP-216**



**TAP-416**



**TAP-420**

## 5 -2400 MHz Taps

### Features

- Low cost high performance, proven technology for MATV distribution.
- 2, 4 way shielded RF Taps .
- Frequency range 5-2400MHz.
- Wall Fixing, nickle plated zinc diecast housing (Mounting screws included).
- Grounding Facilities.
- All Ports F female connectors.
- DC Passing from all ports.
- Max +30Vdc. 2.0A DC passing.
- Foxtel approved.

## Specifications

Indoor Taps

Model			TAP-212	TAP-216	TAP-416	TAP-420
Reference			57001	57002	57003	57004
Foxtel Approval Number			F31072	F31073	F31074	F31075
Item	Frequency MHz	dB	Typical Values			
Insertion Loss IN-Out (Through Loss)	5 - 40 MHz	dB	≤ 4.0	≤ 3.5	≤ 5.0	≤ 4.5
	40 - 692 MHz		≤ 4.0	≤ 3.5	≤ 5.0	≤ 4.5
	692 - 1000 MHz		≤ 4.0	≤ 3.5	≤ 5.0	≤ 4.5
	1000 - 1500 MHz		≤ 4.5	≤ 4.0	≤ 6.0	≤ 5.5
	1500 - 1860 MHz		≤ 5.0	≤ 4.5	≤ 6.5	≤ 6.0
	1860 - 2400 MHz		≤ 5.5	≤ 5.0	≤ 7.5	≤ 7.0
TAP Loss (dB) IN- TAP	5 - 40 MHz	dB	12.5 ± 2.0	16.5 ± 2.0	16.5 ± 2.0	20.5 ± 2.0
	40 - 692 MHz		12.0 ± 2.0	16.0 ± 2.0	16.0 ± 2.0	20.0 ± 2.0
	692 - 1000 MHz		12.0 ± 2.0	16.0 ± 2.0	16.0 ± 2.0	20.0 ± 2.0
	1000 - 1500 MHz		12.0 ± 2.0	16.0 ± 2.0	16.0 ± 2.0	20.0 ± 2.0
	1500 - 1860 MHz		12.0 ± 2.0	16.0 ± 2.0	16.0 ± 3.0	20.0 ± 3.0
	1860 - 2400 MHz		12.5 ± 2.0	16.5 ± 2.0	17.0 ± 3.0	20.5 ± 3.0
Reverse Isolation (dB) OUT - TAP	5 - 40 MHz		≥ 25	≥ 25	≥ 25	≥ 25
	40 - 692 MHz		≥ 30	≥ 30	≥ 30	≥ 30
	692 - 1000 MHz		≥ 28	≥ 28	≥ 28	≥ 28
	1000 - 1500 MHz		≥ 25	≥ 25	≥ 25	≥ 25
	1500 - 1860 MHz		≥ 25	≥ 25	≥ 25	≥ 25
	1860 - 2400 MHz		≥ 25	≥ 25	≥ 25	≥ 25

Specification subject to change without notice

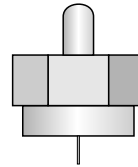
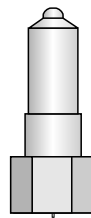
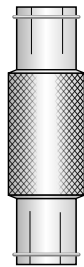
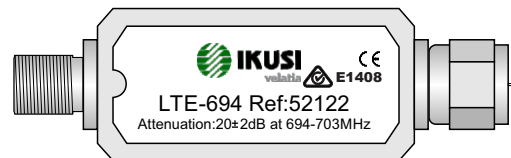
## Specifications

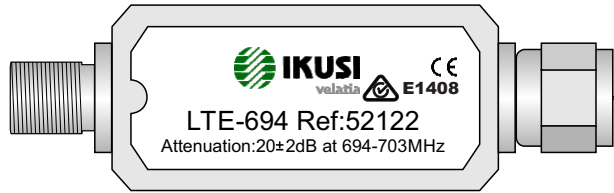
Model		TAP-212	TAP-216	TAP-416	TAP-420	
Reference		57001	57002	57003	57004	
Foxtel Approval Number		F31072	F31073	F31074	F31075	
Item	Frequency MHz	dB	Typical Values			
Mutual Isolation (dB) TAP - TAP	5 - 40 MHz	dB	≥ 25	≥ 25	≥ 25	≥ 25
	40 - 692 MHz		≥ 30	≥ 30	≥ 30	≥ 30
	692 - 1000 MHz		≥ 30	≥ 30	≥ 30	≥ 30
	1000 - 1500 MHz		≥ 25	≥ 25	≥ 25	≥ 25
	1500 - 1860 MHz		≥ 25	≥ 25	≥ 25	≥ 25
	1860 - 2400 MHz		≥ 25	≥ 25	≥ 25	≥ 25
Return Loss (dB) IN / OUT - TAP	5 - 40 MHz	dB	≥ 10	≥ 10	≥ 10	≥ 10
	40 - 692 MHz		≥ 10	≥ 10	≥ 10	≥ 10
	692 - 1000 MHz		≥ 10	≥ 10	≥ 10	≥ 10
	1000 - 1500 MHz		≥ 10	≥ 10	≥ 10	≥ 10
	1500 - 1860 MHz		≥ 10	≥ 10	≥ 10	≥ 10
	1860 - 2400 MHz		≥ 10	≥ 10	≥ 10	≥ 10
Power Passing		A / Vdc	2A / 30Vdc			
Dimensions		L x W x H mm	74 x 50 x 17	74 x 50 x 17	74 x 60 x 15	74 x 60 x 15

Specification subject to change without notice



# FTA & SAT-IF DISTRIBUTION EQUIPMENT STACKER & 5-WIRE ACCESSORIES



**Model: LTE-694**

## ***LTE Bandstop Filter for MATV systems***

### ***Features***

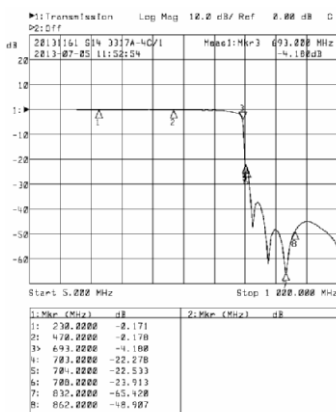
- Suitable for Australian LTE 700MHz Band plan.
- Low cost, solution for LTE & GSM filtering requirement.
- LTE Bandstop Filter and GSM Filter.
- Male to Female F Type connectors for ease of installation.
- F Type Connectors meets AS/NZS 1367:2016 & IEC60169-24 Standards.
- Use with DVB-T TV Antenna & Receiver system for excellent reception of digital signals.
- Ruggedized metal housing.

## Specifications

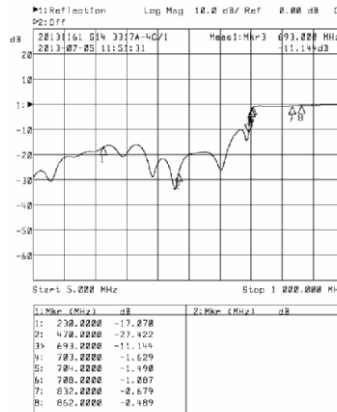
Accessories

Model		LTE-694
Reference		52122
Description	Frequency (MHz)	(Typical Value)
Insertion loss (dB)	5 - 650	< 2
	650 - 682	< 3
	682 - 690	< 3.5
	690 - 694	< 4.2
Rejection (dB)	703	> 22
	704	> 22
	705	> 23
	832	> 65
	862	> 48
Return Loss (dB) IN/OUT	5 - 694	> 12
DC Power Pass	2A / 30V	
Impedance IN/OUT	75 Ohm	
Dimensions (LxWxH) mm	71 x 23.5 x 15	
Weight	37g	

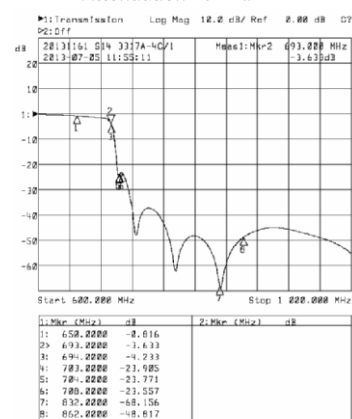
Pass Band insertion loss & Rejectionband attenuation

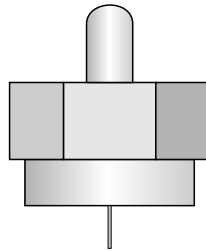


PassBand return loss



694MHz vs 703MHz Attenuation 20 ±2dB



**Model: FTRM**

## ***75Ω Terminator for MATV systems***

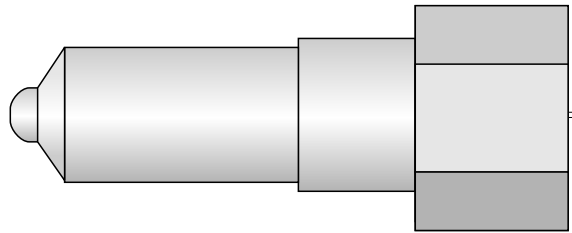
### **Features**

- Suitable for terminating end of line where NO DC voltage is present.
- F Type male connector.
- Standard 75Ω terminator.
- Meets AS/NZS 1367:2016 requirements.
- Meets IEC 60169-24 F Type connector Standard.
- Ruggedized metal housing.

## Specifications

Accessories

Model	MT-DCFTRM	FTRM
Reference	52115	50126
Frequency Range	5 - 2150 MHz	5 - 2150 MHz
Impedance	75Ω	75Ω
Connector Type	F-Male	F-Male
DC	DC Load	Do not use as DC load
Return Loss )	≥ 15 dB	≥ 15 dB
Dimensions dia x L (mm)	11mm x 32mm	11mm x 18mm

**Model: MT-DCFTRM**

## ***DC 75Ω Terminator for MATV systems***

### ***Features***

- Suitable for terminating end of line where DC voltage is present.
- F Type male connector.
- Easily recognisable from standard 75Ω terminator.
- Meets AS/NZS 1367:2016 requirements.
- Meets IEC 60169-24 F Type connector Standard.
- Ruggedized metal housing.
- Foxtel Approved F30415

## Specifications

**Accessories**

Model	MT-DCFTRM	FTRM
Reference	52115	50126
Frequency Range	5 - 2150 MHz	5 - 2150 MHz
Impedance	75Ω	75Ω
Connector Type	F-Male	F-Male
DC	DC Load	Do not use as DC load
Return Loss )	≥ 15 dB	≥ 15 dB
Dimensions dia x L (mm)	11 x 32	11 x 18

**Model: MT-DCFBLOCK**

## ***In line DC Blocker for MATV systems***

### **Features**

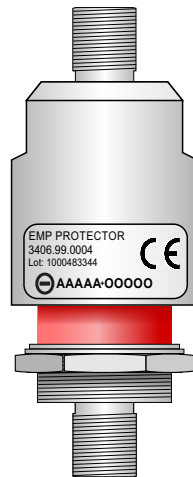
- In line connector suitable for blocking DC voltages in coaxial MATV system.
- F Type male & F Type female connectors.
- Low insertion loss.
- Meets AS/NZS 1367:2016 requirements.
- Meets IEC 60169-24 F Type connector Standard.
- Ruggedized metal housing.



## Specifications

### Accessories

Model	MT-DCFBLOCK
Reference	52114
Frequency Range	5 - 2400 MHz
Impedance	75Ω
Connector Type	F-male / F-female
Insertion Loss	≤ 1 dB
Return Loss )	≥ 15 dB
Voltage Rating	30VDC Min
Dimensions dia x L mm	11 x 45
<b>DC Isolation</b> 1. Both gradual and sudden rise to 500V with no current registered. 2. Breakdown occurs around 1KV with sudden application causing permanent damage	

**Model: PSURGEPRO**

## ***In line Lightning protection for MATV systems***

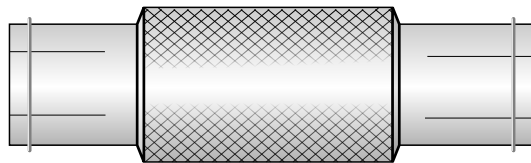
### **Features**

- In line lightning protector for antenna and Satellite systems.
- F Type female & F Type female connectors.
- Low insertion loss.
- Compliant to IEC 61643-21.
- Broadband operation.
- DC continuity for out door powering.
- Fix installed GDT, static spark-over voltage nom 200 V.
- The protector can be installed in reverse.
- Foxtel Approved F30254.

## Specifications

Accessories

Model	PSURGEPRO
Reference	50966
Frequency Range	0 - 2500 MHz
Impedance	75 $\Omega$
Connector Type	F-female / F-female
Insertion Loss	$\leq 0.35$ dB
Return Loss )	$\geq 11$ dB
RF CW power	$\leq 60$ W
PIM 3rd Order	Not Specified
Surge current handling capability	10 single / 5 multiple kA (test pulse 8/20 $\mu$ s)
Residual pulse energy	250 $\mu$ J typically (test pulse 4 kV 1.2/50 $\mu$ s / 2 kA 8/20 $\mu$ s) main path - protected
Operating temperature	-40°C to +85°C
Waterproof rating	IP65 (according to IEC 60529, data refer to the coupled state)
2002/ 95/EC (ROHS)	Telecom compliant
Static spark-over voltage	200 V $\pm 25\%$
Dimensions dia x L mm	17 x 43

**Model: MT-QFMFMC**

## **Quick connect male / male suits F type connectors**

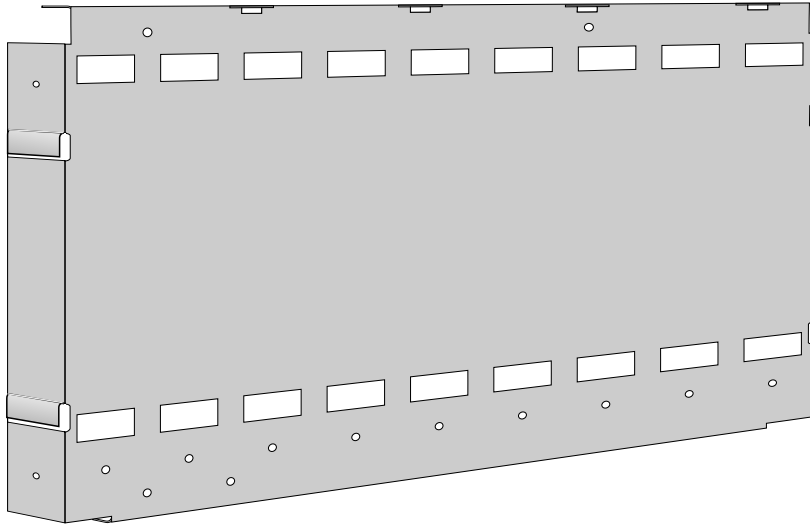
### **Features**

- Suitable for interconnecting 5 wire distribution products.
- Push on connector suits F Type female connectors.
- Where applicable reduces the need for short jumper coax cables.
- Reduces installation time and costs associated.
- Meets AS/NZS 1367:2016 requirements.
- Meets IEC 60169-24 F Type connector Standard.
- Ruggedized metal housing.
- Foxtel Approved F30483.

## Specifications

Accessories

Model	MT-QFMFMC
Reference	52113
Frequency Range	DC - 3000 MHz
Insertion loss	< 0.1dB
Return loss	≥ 18 dB
Connector Type	Push fit male suits F-Type
DC	DC Passing
Dimensions dia x L (mm)	11 x 40

***Model: Unibase***

## ***Mounting plate for Class A products***

### ***Features***

- Suitable for mounting Class A products e.g. TPC-010D, HTL-STC, CFP-900.
- Supplied with earth Strap.
- 9 Slots suits 8 x Class A products plus power supply (power supply fitted RHS).
- Wall mount.
- Rack mount using ABR909L.
- Rack mount for MAC-401 using ABRM19 & MACBRKT.
- Galvanised metal finish.
- Interlocking to allow for expansion.
- Foxtel Approved F30221.

## Specifications

### Accessories

Model	Unibas	Unibas3
Reference	50556	50557
Number of slots	8	3
Metal Finish	Galvanised	Galvanised
Wall mounting	Yes	Yes
Expandable design	Yes	Yes
Rack mounting	using ABRM909L	using ABRM909L
Dimensions L x W x H mm	382 x 264 x 27	250 x 125 x 27
Weight Kg	1.46	0.58

### Ordering:

Unibase 50565 supplied with earth strap

Estrap 50567 RF & electrical earthing strap

ABR909L 50558 Heavy duty 19" side mount kit for unibase

ABRM19 50569 Heavy duty 19" side mounts, suits MAC series mounted to Unibas

MACBRKT 50570 MAC or series one mounting bracket to fit to unibas

**Model: HMT-808**



**Digital Modulator**

## *8 input HDMI to 8 DVB-T*

### **Features**

- 8\* HDMI in , 8 x non adjacent DVB-T RF output, (Optional 1\*ASI in).
- Supports 8 MPTS as mirror of 8 carriers through Data2 output port.
- Up to 1920\*1080p @50Hz/60Hz supported (MPEG-4 HD)/(H.264).
- MPEG-1 Layer 2 audio encoding.
- Eight x DVB-T Agile output channels, 50 ~ 960 MHz & IP Streamer via Data port.
- Video encoding bitrate: 1-13 Mbps.
- 1 RU 19" rack mounting.



## Specifications

Digital Modulator

Model		HMT-808	
Reference		53005	
Input		8 HDMI inputs for option 1 DVB-C(ATSC optional) Tuner for re-mux, F type interface 256 IP input over UDP and RTP, DATA1, RJ45	
Video	Resolution	Input	1920×1080_60P, 1920×1080_60i, 1920×1080_50P, 1920×1080_50i, 1280×720_60P, 1280×720_50P, 720×576_50i, 720×480_60i
		Output	1920×1080_30P, 1920×1080_25P, 1280×720_30P, 1280×720_25P, 720×576_25P, 720×480_30P
	Encoding		MPEG-4 AVC/H.264
	Bit Rate		1.0Mbps~13Mbps (Each Channel)
	Rate Control		CBR / VBR
	GOP Structure		IP...P (P Frame adjustment, without B Frame )
Audio	Encoding		MPEG-1 Layer 2
	Sampling rate / Resolution		48KHz / 24-bit
	Audio Gain		0-255 Adjustable
	Bit-rate		64kbps,128Kbps,192kbps,224kbps,256kbps,320kbps,384 kbps
Multiplexing	Maximum PID Remapping		1x ASI input multiplexed with 8 channels of TS
	Function	PID remapping (automatically or manual)	
		Accurate PCR adjustment	
Generate PSI / SI table automatically			

## Specifications

Model		HMT-808
Reference		53005
<b>Modulation</b>	Standard	ENC300744
	FFT	2K, 4K, 8K
	Bandwidth	6M, 7M, 8M
	Constellation	QPSK, 16QAM, 64QAM
	Guard Interval	1/4, 1/8, 1/16, 1/32
	FEC	1/2, 2/3, 3/4, 5/6, 7/8
	MER	≥42dB
	RF Frequency	50 ~ 960MHz , 1KHz Step
	RF Level Output	-20 ~ +10dBm (87 ~ 117 dBuV), 0.1dB step
	RF Out	8 non-adjacent carriers output (maximum bandwidth 192MHz)
<b>Stream output</b>	1 ASI output as mirror of one of RF output carriers-(Optional) 8 MPTS output over UDP and RTP/RTSP as mirror of 8 DVB-T carriers 1*1000M Base-T Ethernet interface	
<b>System Function</b>	Network management (WEB)	
	English Language, Ethernet software upgrade.	
<b>Miscellaneous</b>	Dimensions (WxLxH)	482mm x 440mm x 44mm
	Approx weight Packaged weight	5.9Kg 8.6Kg
	Temperature	0 ~45°C (working), -20 ~80°C (storage)
	Power	AC 110V ±10%, 50/60Hz, AC 220V ±10%, 50/60Hz
	Packaged size	L: 575mm, W: 585mm, H: 130mm

**NEW**

**OPTICAL PRODUCTS**



# OPTICAL PRODUCT

## Fibre Optic Distribution





**IKUSI**  
velatia

**OPTICAL TRANSMITTER**

**NEW**

**Model: OP-131Tx**

**Optical Tx 1310nm**



## ***Optical Transmitter 1310nm 45-2600 MHz***

### ***Features***

- OP-131Tx series optical transmitter, adopts a high linearity DFB laser, which is directly modulated.
- Suitable for Digital TV & Satellite TV application.
- One fibre can transmit signal of DTV and satellite TV.
- Cooled DFB laser.
- 1310nmTX, output power 10mW.
- FTTH for Digital TV & Satellite TV.
- 1U High 19" Rack mount.
- Other digital video application.
- Applicable receivers: OP-1Rx.

## Specifications

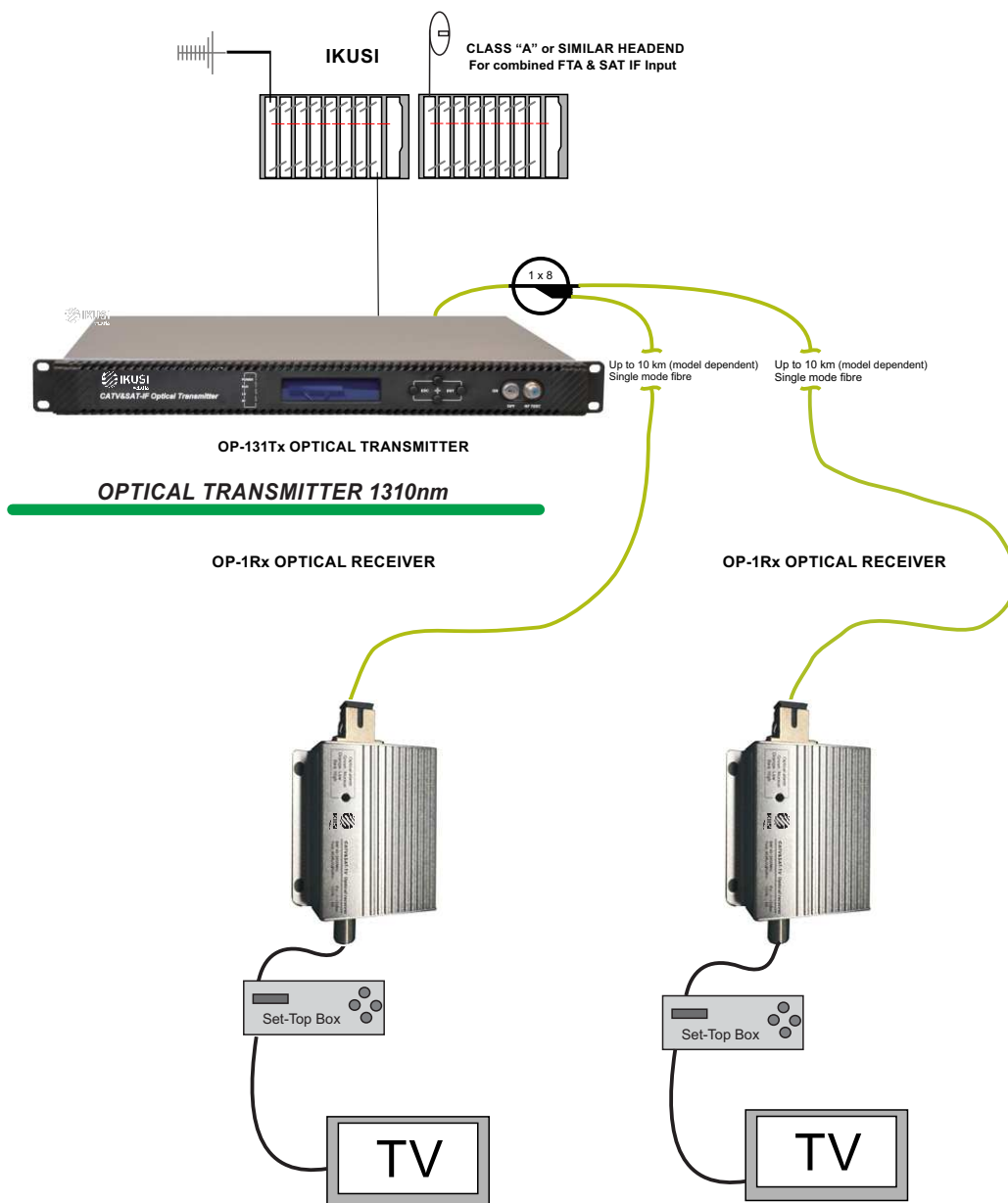
Optical Tx 1310nm

Model		OP-131Tx	
Reference		53001	
Model	Unit	Specification	Test Conditions
<b>RF</b>			
RF Bandwidth	Mhz	45 - 2600	
RF Flatness	dB	±1 ±1	45 ~ 862MHz 950 ~ 2600MHz
RF Input range	dBuV	75 ~ 85 68 ~ 83	45 ~ 862MHz 950 ~ 2600MHz with AGC amplification
RF Return loss	dB	≥ 14 ≥ 10	45 ~ 862MHz 950 ~ 2600MHz
Input Impedance	Ω	75	
RF Test point	dB	- 20	
Channel loading	CH	64 QAM 36	Digital TV QPSK or FM
<b>Link Performance</b>			
CNR	dB	≥51	42CH CENELEC 80dBμV AGC OMI=3.8%
CTB	dB	≥63	
CSO	dB	≥58	
<b>Optical Specifications</b>			
Wavelength	nm	1310	
Wavelength Stability	Pm/°C	-1 ~ 0	TC= 20~ 70 °C
Optical Output Power	dBm	10	
Equivalent Noise Temperature	dB /Hz	155	
Optical Connector		SC/APC	
Optical Return Loss	dB	50	
<b>General Specifications</b>			
Management Interface		RJ45 Web & SNMP RJ45	
Operating Temperature	° C	-0 to 50	
Storage Temperature	° C	-40 to 85	
Power Supply		110 to 265 VAC	
Power Consumption	W	20	(Single Power Supply)
Operating Relative humidity	%	5 to 95	
Unit Dimensions	mm	483 W x 395 D x 44 H	
Unit Weight	Kg	2.4	
Ship Weight	Kg	4.0	

Note1: C/IM3 is defined as the ratio between the peak of carrier signal and triple beat (IM3) by using a two-tone test (1.0GHz and 1.1GHz).

## OPTICAL DISTRIBUTION

### Typical Application Diagram

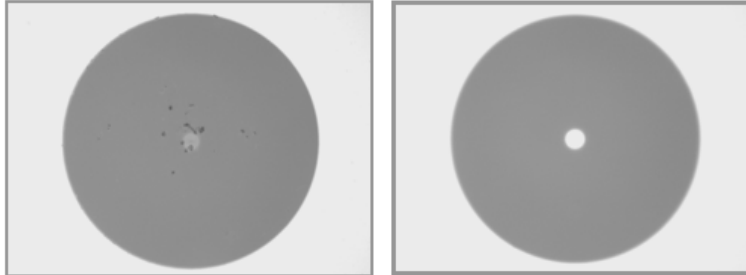


Optical Tx 1310nm

For further information on applications, please contact Ikusi ANZ Pty LTD (+61) 3 9720 8000.

**Ikusi recommends:**

**Always checking cleanliness of optical connectors, prior to any connection to equipment.**



Dirty connector

After Cleaning

**Cleaning Tools etc.**

There are a number of different optical inspection tools, such as passive microscopes, and digital microscopes with LCD screens etc.

Note: Electronic or digital microscopes provide much better feedback on quality of connector faces.

Cleaning tools, include non-lint tissues such as Kimwipes, isopropyl alcohol, and variety other tools.

The type of equipment used is up to customers.

**Rules of Thumb:**

For every 1.0 dBm Optical loss = 2dB RF loss-

The bend radius of optical fibre is different for 1310nm & 1550nm always refer to manufacturer specifications.

Optical patchcords can have different results in output, due to varying insertion loss of end connectors.

For MATV installation we recommend using angled optical connectors, such as SCAPC or similar.

Always support, & correctly route fibre cables, to avoid creating fibre loss in cables.

**Model: OP-1Rx**



**Optical Rx 1310nm**

## Optical Receiver 1310nm 1260nm-1600nm

### Features

- Good linearity over CATV & SAT IF.
- Bandwidth : 45 ~ 2600MHz.
- Receives CATV and SAT IF over single fibre.
- Optical input range of +2dBm to -14dBm (Digital TV).
- Flatness (FL  $\leq \pm 1.0$ dB) Refer to frequency ranges.
- Low power consumption.
- Cost effective performance.

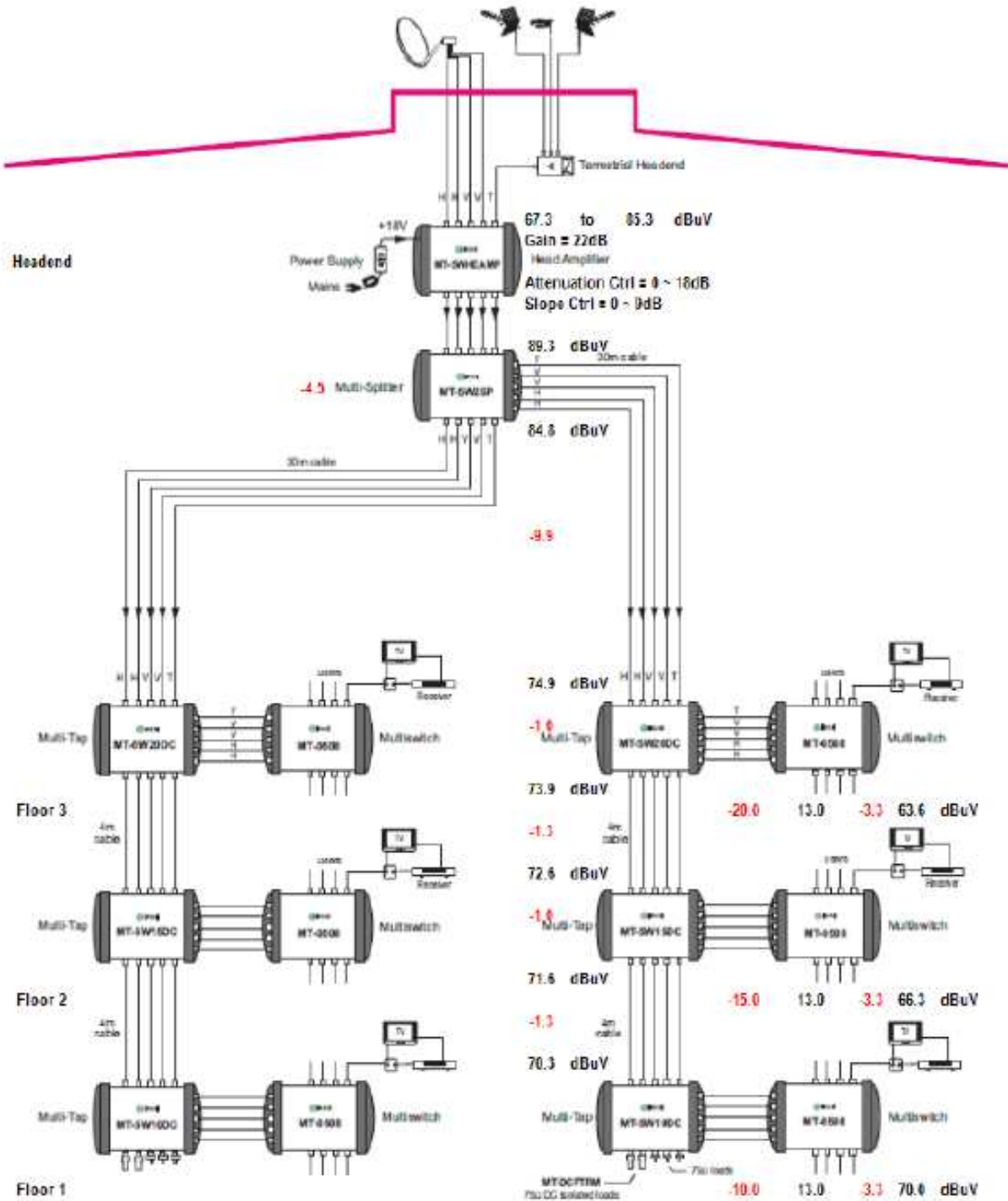


**Optical Rx 1310nm**

## Specifications

Model	OP-1Rx		
Reference	53003		
Parameters	Unit	Specification	Test Conditions
<b>RF</b>			
RF Bandwidth	MHz	45 - 860	
RF Flatness	dB	±1.0	
RF Output Level	dBuV	~90	
RF Return loss	dB	≥ 14	
Output Impedance	Ω	75	
RF Bandwidth	MHz	950 - 2600	
RF Flatness	dB	±2.50	
RF Output Level	dBuV	~ 90	
RF Return loss	dB	≥ 12	
Output Impedance	Ω	75	
<b>Link Performance OMI = 3.8%</b>			
C/N	dB	51	@Pin= -1dBm
CTB	dB	66	Pout>88dBμV, 84CH PAL-D, OMI=3.8%
CSO	dB	62	
HUM	dB	-60	
<b>Optical Specifications</b>			
Wavelength	nm	1260 - 1600	
Optical Input power	dBm	+2 ~ -14	Digital TV
		+2 ~ -20	Satellite TV
Responsivity	A/W	≥ 0.85	
Optical Connector		SC/APC	
Optical Return Loss	dB	50	
<b>General Specifications</b>			
Operating Temperature	° C	-20 ~ +60	
Storage Temperature	° C	-40 ~ 85	
Power Supply		+12VDC	
Power Consumption	W	≤ 3	
Operating Relative humidity	%	5 to 95	
Unit Dimensions W x D x H	mm	105 x 67 x 24	
Unit Weight	Kg	0.10	
Ship Weight	Kg	0.14	

Note: Measured in a typical system configuration for the nominated channel numbers, and nominated fibre lengths for each model at 25 °C ambient temperature.



**Figure 1:** An example of a 5-wire system for 4 Satellite TV and 1 Terr TV.

Ikusi Technotes can be found on google site below:

<https://sites.google.com/site/ikusitechnotes/>



Ikusi was born more than 45 years ago. Today, it has a team made up of over 800 professionals and clients in over 80 countries, devoting 4% of its invoicing to R&D+i. Ikusi is present in 9 countries: Germany, Australia, Chile, Colombia, USA, Spain, UAE, France and Mexico.

In addition to this, Ikusi forms part of Velatia, a family, industrial and technological group with a global vocation, made up of a multicultural team of almost 2,900 people from 20 countries. Velatia has offices in 19 countries, 15 manufacturing centres and a first rate Research and Technology Centre on a worldwide scale.



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