

Amplifiers UHF,DAB and Band 2 Inputs

- For indoor mounting
- Metal housing with plastic side brackets
- High input selection
- F-Connectors

**Ideal for Separate
Inputs FM,DAB,UHF**

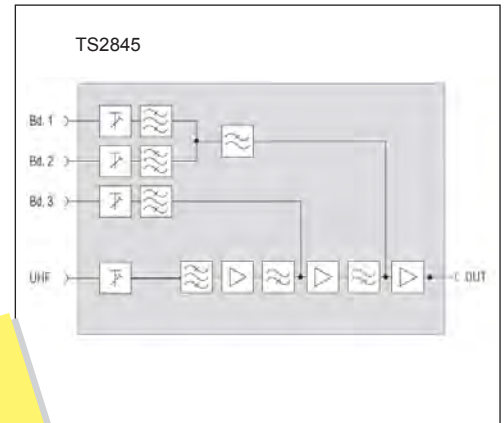


£46.00

**22dB Gain
108dBuV output***

Shipping
£3.90 Prices Ex VAT

Type	TSC2248	
Inputs	3	
Frequency range	MHz	87 - 108 174 - 230 470 - 862
Gain	dB	22
Output level		
60 dB IMA.3	dBuV	108
60 dB IMA.2	dBuV	105
Noise figure	dB	65
Operating voltage	V AC	230
Power consumption	VA	45
Connectors	F female	
Dimensions	mm	192 x 125 x 50
Weight	kg	045



Performance Enhanced for Digital

Discontinued ,see alternatives page 6 and 8

Type	TS2845					TS4560				
Frequency MHz	VHF 1 47-68	FM 87.5-108	VHF 2 174-230	UHF 470-862		VHF 1 47-68	FM 87.5-108	VHF 2 174-230	UHF 470-862	UHF 470-862
Gain dB	21	21	28	28		35	35	35	45	45
Attenuator dB	-20	-20	-20	-20		-20	-20	-20	-20	-20
Output Level 60dB IMA	113dBuV					120dBuV				
Noise dB	≤ 6	≤ 6	≤ 6			≤ 6	≤ 6	≤ 6	≤ 7	≤ 10
Dimensions W xHxD	242x103x60mm					242x103x60mm				
Voltage	230V 6W					230V 9W				
Price	£89.19					£122.94				

Line amplifiers with return path options for distributing cable tv.



Type	Frequency	Gain	Att dB	Reverse Channel	Reverse Channel Gain	Max Output 60dB 1MA 3 DIN 45004B	Noise	Power AC	Price
TSC2054/65	85-862MHz	0-20dB	0-20	5-65MHz	16dB	115dBuV	≤5dB	230V 4.5w	£54.78
TSC3054/65	85-862MHz	10-30dB	0-20	5-65MHz	25dB	115dBuV	≤5dB	230V 4.5w	£54.78

TXS

Discontinued

Multiband amplifiers for head ends



Type	VS 80A				
Frequency MHz	VHF 1 47-68	FM 87-108	VHF 2 174-230	UHF 470-862	UHF 470-862
Gain dB	35	35	35	42	42
Attenuator dB	-18	-18	-18	-18	-18
Output Level EN 50083-5	119dBuV				
Noise dB	≤ 7	≤ 7	≤ 7	≤ 7	≤ 7
Dimensions W xHxD	165x105x45mm				
Voltage	230V 4W				
Test output	-20dB				
Price	£108.28				



Type	TVX 81	TVX 82	TVX 86	TVX 87
Frequency MHz	87-862	87-862	47-862	47-862
Gain dB	18-21	28-31	18-31	28-31
Number of outputs	1	1	1	1
Attenuator dB	-18	-18	-18	-18
Output Level EN 50083-5-3	114dBuV	114dBuV	114dBuV	114dBuV
Output Level 42 ch CENELEC	96dBuV	96dBuV	96dBuV	96dBuV
Output Level 42 ch CENELEC 6dB slope	98.5dBuV	98.5dBuV	98.5dBuV	98.5dBuV
Return path				
Gain dB Active passive via jumper	20dB /-2dB	20dB /-2dB	-2dB	-2dB
Adjustable attenuator dB	-18	-18	-	-
Output Level EN 50083-5-3	112dBuV	112dBuV	-	-
Passive return path MHz	4-65	4-65	4-30	4-30
Active return path MHz	4-65	4-65	-	-
Operating Temperature	-20 deg C + 55 deg C *			
Dimensions W xHxD	163x90x47mm			
Voltage	230V 3.5W			
Price	£36.65	Discontinued	£36.65	£45.70

* MTBF failures worsen running at high temperature. All electronic equipment benefit from operating in moderate temperatures

High Output ,Head End or Line Amplifiers, with active and passive return path options, very flat frequency response.

40-20 dB of gain ,adjustable.

High output capability 127dBuV**

Large channel capacity**

Ideal for distribution from a cable TV feed

20dB Variable gain control, 20dB variable slope control

Broadband ADSL Cable modems can be used on the network via optinal return path.

**DIN 45004B



Return path now function included

Technical data		
Type	TSC4065	TSC4065LP
Frequency range	85...1006 MHz	
Gain	switchable 30/40 dB	
Attenuator adjustable via switches 2,4,6,12dB	0...16 dB	
Equalizer	0...16 dB / Interstage 0 or 6 dB	
Noise figure	≤ 6,5 dB	
Test points	-20 dB	
Output level max IMA3 60 dB	127 dBμV	
Return path freq.	5...65 MHz	
Gain return path	30 dB	
Return path Attenuator	0...16 dB	
Return path Equalizer	0...12 dB	
Operating voltage	180...255 V~	26...70 V~
Power consumption	13,5 W	13,5 W
Dimensions	242 x 105 x 60 mm	

TSC4065 RP £190.76

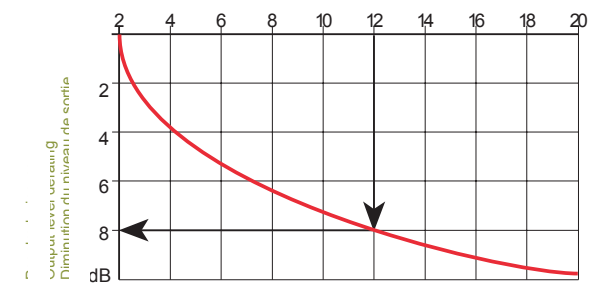
TSC4065 £156.20 .No Return path

TSC4065LP £259.67

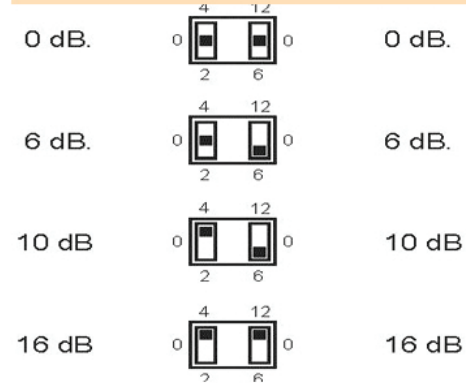
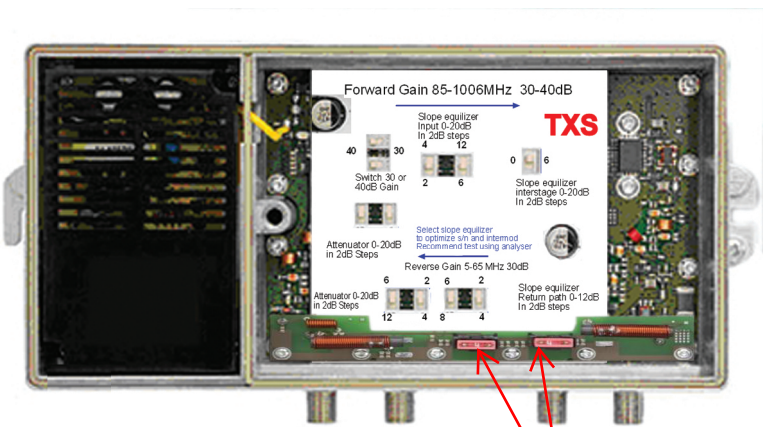
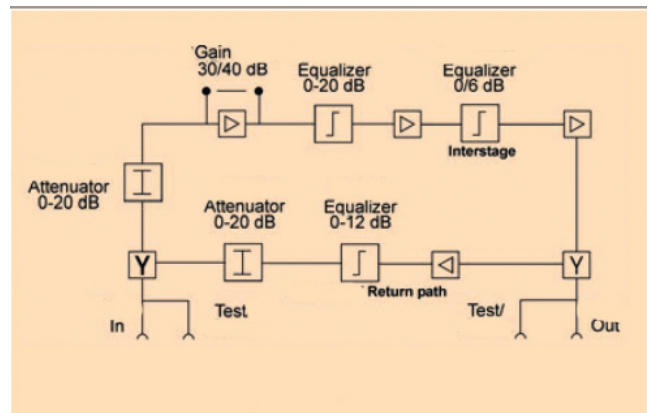
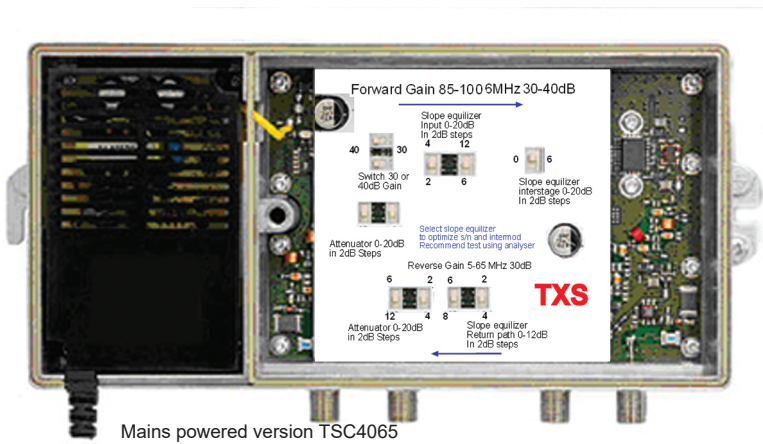
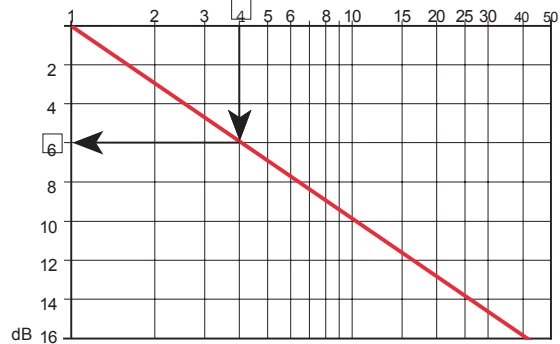
Digital multiplexes need four times the power compared to analogue TV, but will work at least 20 dB lower, consequently this amplifier will provide 9dB extra for a typical system distributing 8 DVB-T multiplexes all at the same level. Allowance has to be made as with old analogue TV channels for different levels that may be received from the antenna. Design the system for 40dBuV at the outlet, this provides enough for very old TV sets with high tuner noise levels. More modern TV sets will work on at least 10dB less than this. Some local stations use 16QAM or QPSK modulation so again a much lower RF level at the point will work.

Derating for number of channels DIN45004B

Number of distributed channels, allow additional margin for digital muxes



Derating for cascading of amplifiers



Links to route line power via input or output or through

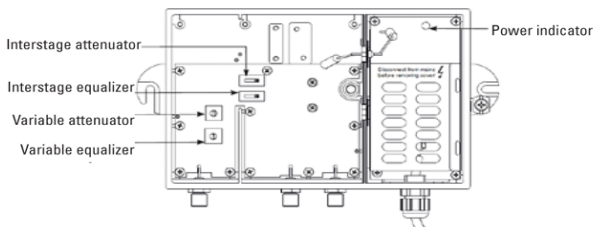
Attenuation and slope control for forward and return path via switch control. This now makes it simpler to set when calculating coax cable losses

TXS

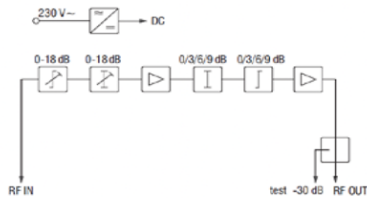
TSC4065 A High Output CATV amp



TSC4065 A £161.00 Ex Vat



Block diagram



Frequency range	47 ... 862 MHz
Flatness	± 0.5 dB
Gain	41 dB
Gain adjustment	0 ... 18 dB
Slope adjustment, typical	0 ... 18 dB
Interstage attenuator	0/3/6/9 dB
Inverse equalizer	0/3/6/9 dB
Output level IMA3 60 dB	126dBuV
Input and output return loss	$=18$ dB @40 MHz - 1.5 dB/octave
Noise figure	<5 dB uV
Test point	-30 dB
Supply voltage limit values	198...250 VAC, 50/60 Hz
Power consumption	13 W
Operating temperature range	$-20...+50$ °C

Dimensions

180 x 132 x 76 mm (main body)
213 x 132 x 76 mm (with fixing ears)

Weight (packed) 1.4 kg

High Power Repeater Amplifiers For Networks with Return Path

Return-path modules

Active: VMR 24
Passive: VMR 0

Variable attenuator

Equalizer modules

Fixed equalizer: VM ...
Variable equalizer: VM ... R ...

Return-path filter

for 30 / 55 / 65 MHz
VMF ...

Interstage modules

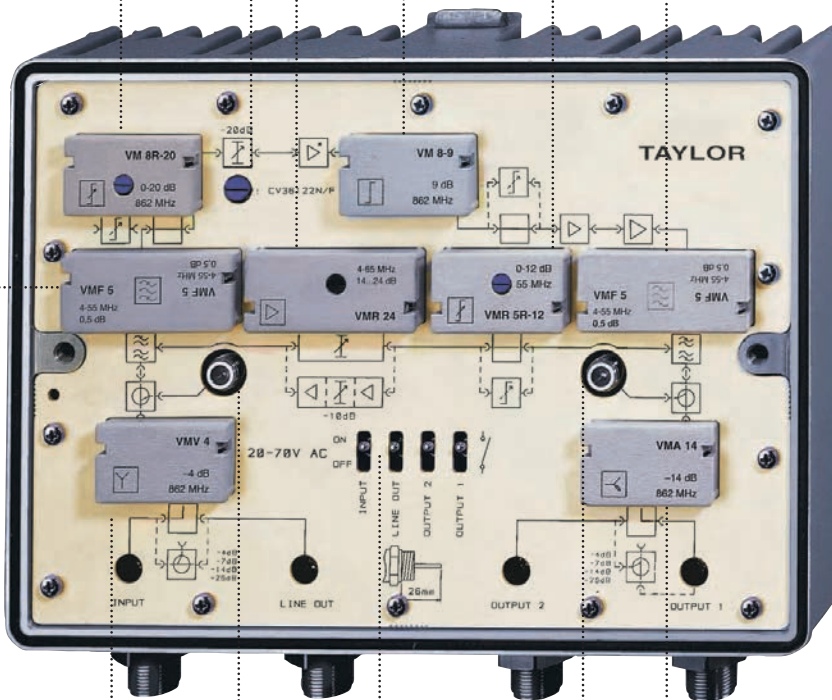
Variable attenuator: VMD ...
Fixed equalizer: VM ...
Variable equalizer: VM ... R ...

Return-path equalizer

Fixed equalizer: VMR ...
Variable equalizer: VMR ... R ...

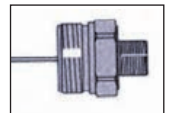
Return-path filter

for 30 / 55 / 65 MHz
VMF ...



Select F or IEC Connector

F



TF1 £7.35

IEC



TIEC 1 £10.53

Modules for line-out port

Splitter: VMV 4
Tap: VMA ...

Input test socket

Remote power

4 switches or
plug in fuses to
determine the
power passing
ports

Output modules 1 / 2

Splitter: VMV 4
Tap: VMA ...
Test port: VMM 20

Output test socket

**Up to 128dBuV (68dBmV)
Din4500B**

Currently CATV networks are being extended to "Full Service Networks" (FSN), apart from distributing TV and radio programmes, these networks carry interactive services like fast Internet access, cable telephony, and other bi-directional applications. Therefore the return-path is becoming more and more important to transmit subscriber messages back to the headend of the network. Passive return paths have the advantage of being bi-directional and reliable

Return-path of your choice

Depending on the requirements of the cable operator, the upper return-path frequency may be chosen between 30, 55 and 65 MHz. Optional passive or active modules may be inserted. A separate slot is provided for the return-path equalizer.

Customize to suit

With only a few different modules a wide range of configurations can be covered by using the optional modules, without need for a large stock. Each amplifier is supplied with one variable attenuator module and through links apart from the return path filter.

Housings meet highest demands

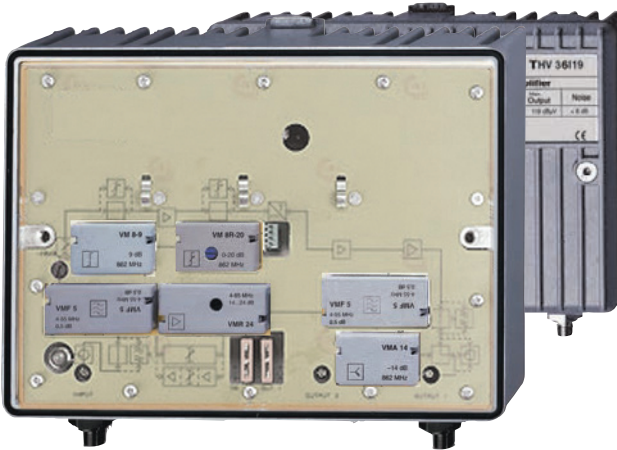
The new aluminum die-cast housings meet protection class IP66 requirements. This means that the amplifier is dust-proof and water-protected which yields constant electrical features and long product life.

To change the configuration of the amplifier it can be opened by loosening 2 screws and unclasp the lid by 180 degrees where it will lock in position until all changes are done.

The depth from wall to lid was limited to 90 mm to make the amplifier fit into common installation boxes.

Easy installation

The amplifier is held by a mounting bracket. Upon fixing the bracket firmly to its support by means of two screws, the amplifier may be slid on the bracket and arrested with only one screw.



Massive Power

High Power Repeater Amplifiers
Up to **128dBuV (68dBmV)**
DIN4500B
4-862MHz

Type	Frequency	Gain dB	Reverse Channel	Variable Attenuator dB	Noise	Max output **		Return Loss	Power AC	Price
						60dB 1MA 3 DIN4500B	60dB 1MA 2 DIN4500A1			
THV40126	47-73-86 -862MHz *	32/40	4-30-55-65MHz*	20 Forward Path	≤7.0dB	126-128dBuV	118-119dBuV	20dB to 40MHz	180-255V 14W	£385.00
THV40126LP	47-73-86 -862MHz *	32/40	4-30-55-65MHz*	20 Forward Path	≤7.0dB	126-128dBuV	118-119dBuV	20dB to 40MHz	24-70V 14W	£385.00

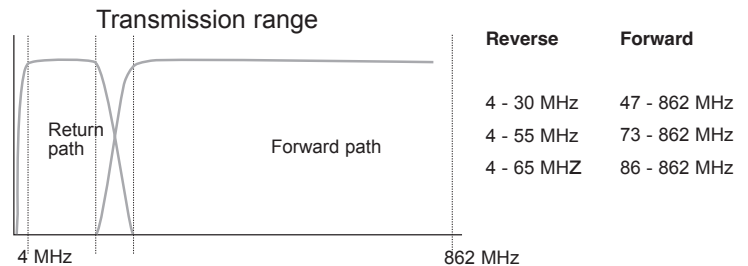
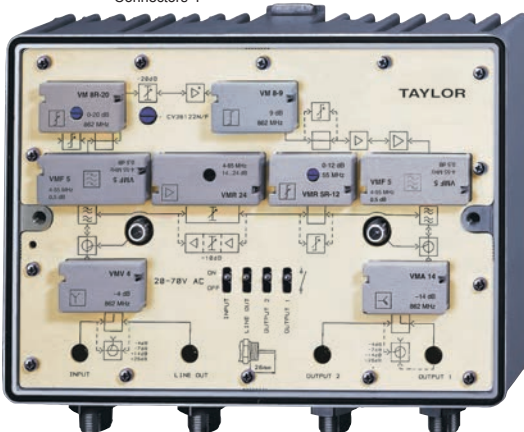
Frequency Response Flatness ± .75dB Power Through 2.5A Hum Modulation ≥ 65dB

*Depending on which return path filter (VMF) is used

**Output levels quoted are at 862MHz & 600MHz

Specifications subject to change

Connectors F



Because of the frequency response flatness and line power through current handling, use these amplifiers for long trunk lines. The gain of the amplifiers can be selected 20-40dB.

Type	Frequency	Gain dB	Reverse Channel	Variable Attenuator dB	Noise	Max output **		Return Loss	Power AC	Price
						60dB 1MA 3 DIN4500B	60dB 1MA 2 DIN4500A1			
TCV40126	47-73-86 -862MHz *	41	4-30-55-65MHz*	20 Forward Path	≤6.5dB	126-128dBuV	118-119dBuV	20dB to 40MHz	180-255V 14W	£408.80
TCV40126LP	47-73-86 -862MHz *	28/36	4-30-55-65MHz*	20 Forward Path	≤6.5dB	126-128dBuV	118-119dBuV	20dB to 40MHz	24-70V 14W	£408.80

Frequency Response Flatness ± .5dB Power Through 2.5A Hum Modulation ≥ 65dB

*Depending on which return path filter (VMF) is used

**Output levels quoted are at 862MHz & 600MHz

Connectors PG11 see connector page for PG11 Adaptors

Plug in modules

Type	Frequency Range	Insertion Loss	Price
Return Path Filter			
VMF3	4-30MHz	.5dB	£14.38
VMF6	4-65MHz	.5dB	£14.38



Type	Frequency Range	Gain	Price
Return Path Filter with Level Adjustment, Passive and Active			
VMR0	4-30MHz	-10/0dB	£10.78
VMR24	4-55MHz	14-24dB	£17.96



Type	Frequency Range	Equalization	Insertion Loss	Price
Variable Equalizers Return Path				
VMR 3R12	4-30MHz	0-10dB	1dB	£11.21
VMR 6R12	4-65MHz	0-10dB	1dB	£11.21



Type	Frequency Range	Equalization	Insertion Loss	Price
Variable Equalizers Forward Path				
VM 4 R-10	47-450MHz	0-10dB	1dB	£10.78
VM 4 R-20	47-450MHz	0-20dB	1dB	£10.78
VM 6 R-10	47-606MHz	0-10dB	1dB	£10.78
VM 6 R-20	47-606MHz	0-20dB	1dB	£10.78
VM 8R-10	47-862MHz	0-10dB	1dB	£10.78
VM 8R-20	47-862MHz	0-20dB	1dB	£10.78
VMD 20	4-862MHz	0-20dB	1dB	£8.44



Type	Port 1	Port 2	Price
Output Splitter Modules 4-862MHz			
VMM20	0.5dB	20dB	£8.87
VMA7	2dB	7dB	£10.46
VMA14	1dB	14dB	£10.46
VMV4	4dB	4dB	£10.46

