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## PARABOLIC OFFSET REFLECTORS



- || For reception of satellite signals in the frequency range 10,7–12,75 GHz
- || Simple setup on site – only 2 completely pre-assembled parts
- || High stability – 40 mm die-cast feed mount and solid screw connection of reflector with mounting bracket
- || Corrosion-resistant – Aluminium reflector, hot-dip galvanized mast bracket
- || Esthetically pleasing – available in three colors, integrated cable duct
- || Available colors: white, graphite, brick red

Type		SAT 75	SAT 85	SAT 100	SAT 120
Color / Article No.	white	5700 1277	5700 1280	5700 1283	5700 0877
	graphite	5700 1278	5700 1281	5700 1284	5700 1050
	brick red	5700 1279	5700 1282	5700 1285	—
Reflector-Ø	m	0,75	0,85	1,0	1,2
Gain	dB	37,3	38,3	40	41,0 ... 42,5
Half-value aperture	°	2,4	2,1	1,8	1,37
Mount for mast Ø	mm	40 - 80	40 - 80	40 - 80	55 - 100
Adjustment range, elevation	°	10 - 40	10 - 40	10 - 40	20 - 50
Wind load	N	480	600	800	1250
Width x height	cm	75 x 80	85 x 90	94 x 101	124 x 133
Packing dimensions	cm	78 x 94 x 14	93 x 94 x 25	115 x 102 x 35	140 x 130 x 15
Weight	kg	7,0	11,0	11,5	14,5



### Coherent appearance

- || Finishing of reflector, support arm and bracket in same color tone



### Multi-feed-compatible

- || Flexible rail system for up to 4 LNBS
- || Slip safe construction of support arm and LNB mount



### High stability

- || Generous material profiles and hexagonal clamping nuts
- || One-piece construction of support arm and LNB mount



### Protected cable duct

- || Secure and orderly cabling on support arm

## MULTI FEED MOUNTS

- || Rail system with additional feed adaptors Ø 40 mm for simultaneous reception of up to 4 satellites:  
Spacing:  
SAT 75 / SAT 85: 6°  
SAT 100: 4°  
SAT 120: 3°
- || Easy mounting to all DELTA Electronics reflectors
- || **MFA 120:** Adapter for offset reflector SAT 120.  
Required with multi feed mounts MFH 2-4



Type		MFH 2	MFH 3	MFH 4	MFA 120
Article No.		5700 1191	5700 1192	5700 1193	5700 0722
LNB fittings		2	3	4	1
Provided LNB fittings		1	2	3	1
Shift range	°	6	25	25	–
Weight	kg	0,2	0,4	0,5	0,2

## LNB'S

- || For reception of digital and analogue SAT signals
- || Watertight die-cast housing and additional protection by means of plastic outer housing
- || Suitable for all standard feed mounts of 40 mm Ø
- || Low current consumption



Type		UC 21	UC 22	UC 44	UC 44 S
Description		Single-LNB	Twin-LNB	Quattro-LNB	Quattro-Switch-LNB
Article No.		5700 0881	5700 0883	5700 0885	5700 0886
Frequency range low-band	GHz	10,70 - 11,70	10,70 - 11,70	10,70 - 11,70	10,70 - 11,70
high-band	GHz	11,70 - 12,75	11,70 - 12,75	11,70 - 12,75	11,70 - 12,75
Noise figure typ.	dB	0,2	0,2	0,2	0,2
Gain	dB	> 50	> 50	> 50	> 50
Oscillator frequency	GHz	9,75 low 10,60 high	9,75 low 10,60 high	9,75 low 10,60 high	9,75 low 10,60 high
Polarization decoupling	dB	25	25	25	25
Switching voltage (H/V)	VDC	14/18	2 x 14/18	12...18	4 x 14/18
Band switching signals	kHz	0/22	2 x 0/22	–	4 x 0/22
Current consumption	mA	max. 150	max. 250	max. 250	max. 200
Feed fitting	mm	40	40	40	40
Operating temperature	°C	-30...+60	-30...+60	-30...+60	-30...+60
Weight	kg	0,38	0,45	0,47	0,47



## SATELLITE RECEIVER DVB-S



- **SDR 510 U:** SAT-Receiver DVB-S with 2 Common Interface slots (CI)
- Smartcard card reader SMR 510 optionally extendable
- UNICABLE technology ready for single-cable-systems
- **SDR 610 PVR:** SAT-Receiver DVB-S with hard disc (HDD) and twin tuner
- 2 Common Interface slots (CI)
- USB connectors
- UNICABLE technology ready for single-cable-systems

Type	SDR 510 U	SDR 610 PVR
Article No.	5700 0894	5700 1346
Description	DVB-S Receiver	DVB-S/PVR Receiver
System type	DVB-S	DVB-S
No. of tuners / input frequency range MHz	1 / 950 - 2150	2 / 950 - 2150
Demodulation	QPSK	QPSK
RF modulator (K21-K69)	1	1
Video decoding	MPEG-2	MPEG-2
Video bit rate Mbit/s	1,5 - 15	1,5 - 15
Sampling rate kHz	32 / 44,1 / 48	32 / 44,1 / 48
DiSEqC control	Version 1.0 / 1.2 (USALS) / Unicable	Version 1.0 / 1.2 (USALS) / Unicable
UniCable Ready	■	■
Hard disc / Time Shift Recording	- / -	250 GB / ■
Common Interface Slots	2	2
Display	7-digit	VFD alphanumeric
Channel memory positions	4000	6000
Multi-languages on-screen display / EPG	■ / ■	■ / ■
Program scan	■	■
Programmable channel lists	■	■
Favorite channel lists (8)	■	■
Videotext decoder, page memory (800)	-	-
Picture format recognition	16:9, 4:3, Pan Scan, Letter-Box	16:9, 4:3, Pan Scan, Letter-Box
EPG programmable timers	12 events	18 events
Software update	RS 232	RS 232 / USB
Child protection (channel block function)	■	■
Mains switch	■	■
Connections		
Scart-(RGB-YUV) / S-Video	■ / ■	■ / ■
HDMI / YPbPr	- / ■	- / ■
Optical S/PDIF, Dolby Digital	-	■
Audio- / Video output (RCA)	2	2
RS 232	1	1
USB 2.0	-	1
Operating voltage V~	90 - 240	90 - 240
Power consumption operation/standby W	25 / 10	24 / 13
Dimensions mm	310 x 60 x 220	360 x 60 x 280
Weight kg	2,0	3,2



## SATELLITE RECEIVER DVB-S2

- || HDTV-SAT receiver for the reception of high definition satellite TV-programs
- || 2 Common Interface slots (CI)
- || USB connectors (e.g. for external hard disc)
- || **SDR 7200 PVR:** With hard disc (HDD) and twin tuner
- || USB connectors
- || UNICABLE technology ready for single-cable-systems



Type		SDR 7200 USB	SDR 7200 PVR
Article No.		5700 1397	5700 1378
Description		DVB-S2/HDTV Receiver	DVB-S2/PVR Receiver
System type		HDTV DVB-S2 / DVB-S	HDTV DVB-S2 / DVB-S
No. of tuners		1	2
Input frequency range	MHz	950 - 2150	950 - 2150
Demodulation		QPSK / 8PSK	QPSK / 8PSK
RF modulator (K21-K69)		1	1
Video decoding		MPEG-2/4, H.264/AVC	MPEG-2/4, H.264/AVC
Video bit rate	Mbit/s	1,5 - 15	1,5 - 15
Sampling rate	kHz	32 / 44,1 / 48	32 / 44,1 / 48
DiSEqC control		Version 1.0 / 1.2 (USALS)	Version 1.0 / 1.2 (USALS) / Unicable
Hard disc / Time Shift Recording		- / -	250 GB / ■
Common Interface Slots (CI)		2	2
Display		VFD, alphanumeric	VFD, alphanumeric
Channel memory positions		4000	8000
Multi-languages on-screen display / EPG		■ / ■	■ / ■
Program scan		■	■
Programmable channel lists		■	■
Favorite channel lists (8)		■	■
Videotext decoder, page memory (800)		■	■
Picture format recognition		16:9, 4:3, Pan Scan, Letter-Box	16:9, 4:3, Pan Scan, Letter-Box
EPG programmable timers		8 events	20 events
Software update		RS 232 / SAT	USB / SAT
Child protection (channel block function)		■	■
Mains switch		■	■
Connections			
Scart-(RGB-YUV) / S-Video		■ / ■	■ / ■
HDMI / YPbPr		■ / ■	■ / ■
Optical S/PDIF, Dolby Digital		■	■
Audio- / Video output (RCA)		2	2
RS 232		1	1
USB 2.0		2	3
Operating voltage	V~	90 - 240	90 - 240
Power consumption operation/standby	W	27 / 13	27 / 13
Dimensions	mm	360 x 60 x 280	360 x 60 x 280
Weight	kg	2,6	3,2

## MULTISWITCH 5-CABLE SYSTEM

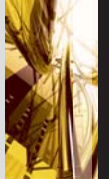


### Stand alone switch with power supply

- For selection of 4 satellite polarities
- Input for terrestrial signals
- Switching mode 13/18 V, 0/22 kHz
- For distribution of analogue and digital signals
- Active switch with low tap loss
- Connectors: F female
- Metal housing with plastic side brackets
- Wide product range with models for 4, 6, 8, 12, 16, 24, 32 and 48 subscribers

Type		MS 54 N		MS 56 N		MS 58 N		MS 5012 N	
Article No.		1016 1501		1016 1502		1016 1503		1016 1504	
Frequency range	MHz	47-862	950-2200	47-862	950-2200	47-862	950-2200	47-862	950-2200
Inputs		1	4	1	4	1	4	1	4
Outputs subscribers		4		6		8		12	
Gain	dB	0 ... 4	-2 ... -4	0 ... 4	-4 ... -6	0 ... 3	-4 ... -6	0 ... 4	-4 ... -6
Isolation:	SAT/SAT	dB	> 25	> 25	> 25	> 25	> 25	> 25	> 25
	SAT/TER	dB	> 25	> 23	> 23	> 23	> 23	> 25	> 25
	Subscriber	dB	> 23	> 28	> 23	> 28	> 23	> 28	> 28
Output level:	35 dB IMA <sub>3</sub>	dBμV	103	103	103	103	103	103	103
	60 dB IMA <sub>3</sub>	dBμV	96	92	92	92	90	90	103
Operating volatage	V~	230		230		230		230	
Remote feeding LNB	mA	max. 350		max. 350		max. 350		max. 350	
Power consumption without LNB remote feeding	W	4,1		4,5		5,0		4,5	
Dimensions	mm	230 x 120 x 60		345 x 120 x 80		345 x 120 x 80		440 x 120 x 80	
Weight	kg	1,0		1,3		1,3		1,3	

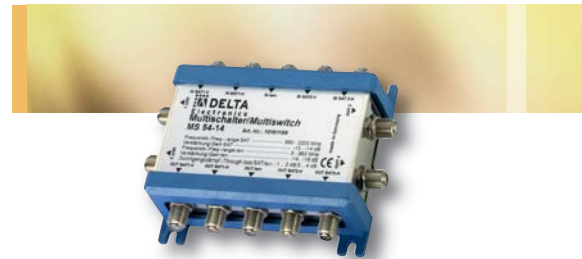
Type		MS 5016 N		MS 5024 N		MS 5032 N		MS 5048 N	
Article No.		1016 1505		5700 1228		5700 1444		5700 1435	
Frequency range	MHz	47-862	950-2200	47-862	950-2200	47-862	950-2200	47-862	950-2200
Inputs		1	4	1	4	1	4	1	4
Outputs subscribers		16		24		32		48	
Gain	dB	0 ... 4	0 ... -3	0 ... 3	-4 ... -6	0 ... 3	0 ... 6	0 ... 3	0 ... 6
Isolation:	SAT/SAT	dB	> 25	> 25	> 25	> 25	> 25	> 25	> 25
	SAT/TER	dB	> 26	> 23	> 23	> 23	> 23	> 25	> 25
	Subscriber	dB	> 28	> 28	> 28	> 28	> 23	> 28	> 28
Output level:	35 dB IMA <sub>3</sub>	dBμV	98	94	94	100	100	100	100
	60 dB IMA <sub>3</sub>	dBμV	88	86	86	88	88	88	100
Operating volatage	V~	230		230		185 - 265		185 - 265	
Remote feeding LNB	mA	max. 350		max. 350		max. 500		max. 500	
Power consumption without LNB remote feeding	W	5,0		7,5		8,5		9,5	
Dimensions	mm	530 x 120 x 80		440 x 120 x 80		384 x 120 x 71		484 x 120 x 71	
Weight	kg	1,3		1,3		1,3		1,3	



## MULTISWITCH 5-CABLE CASCADABLE SYSTEM

### Cascading switch

- For selection of 4 satellite polarities and terrestrial
- Switching mode 13/18 V, 0/22 kHz
- For distribution of analogue and digital signals, return path compatible
- Models with different tap losses to optimize networks
- Remote feed from the connected receivers
- ASIC-technology, high linearity
- Connectors F female, Metal housing with plastic side brackets
- **MS 54:** Terminal switch with DC-connection, LNB remote feeding via plug-in power supply NG 1880 (p. 68)



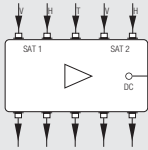
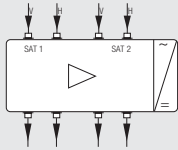
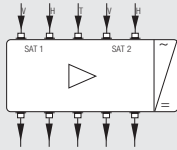
Type		MS 54		MS 54-14		MS 54-19		MS 54-24	
Article No.		1016 1217		1016 1199		1016 1230		1016 1231	
Frequency range	MHz	5-862	950-2200	5-862	950-2200	5-862	950-2200	47-68	950-2200
Inputs		1	4	1	4	1	4	1	4
Outputs subscriber		4		4		4		4	
Outputs trunkline		5		5		5		5	
Tap loss	dB	2 ... 4	2 ... 4	14 ... 16	12 ... 14	17 ... 19	17 ... 19	24 ... 26	22 ... 24
Through loss trunkline	dB			1 ... 2,8	1 ... 2	2,2	1 ... 2	1 ... 1,5	1 ... 2
Isolation:									
SAT/SAT	dB	> 24		> 24		> 24		> 24	
SAT/TER	dB	> 20		> 20		> 20		> 20	
Subscriber	dB	> 20	> 20	> 20	> 20	> 20	> 20	> 20	> 20
Output level:									
35 dB IMA <sub>3</sub>	dBμV	89		89		89		89	
60 dB IMA <sub>3</sub>	dBμV	91							
LNB remote feeding max	mA	max. 500		max. 600		max. 600		max. 600	
Power consumption	mA	< 150		< 150		< 150		< 150	
Dimensions / Weight	mm/kg	125 x 90 x 35 / 0,3		125 x 90 x 35 / 0,3		125 x 90 x 35 / 0,3		125 x 90 x 35 / 0,3	

Type		MS 56-14		MS 58-14	
Article No.		1016 1602		1016 1603	
Frequency range	MHz	5-862	950-2200	5-862	950-2200
Inputs		1	4	1	4
Outputs subscriber		6		8	
Outputs trunkline		5		5	
Tap loss	dB	17 ... 18	14 ... 15	17 ... 18	14 ... 15
Through loss trunk line	dB	4 ... 5	1 ... 2	4 ... 5	1 ... 2
Isolation:					
SAT/SAT	dB	> 25		> 25	
SAT/TER	dB	> 20		> 20	
Subscriber	dB	> 20	> 20	> 20	> 20
Output level:					
35 dB IMA <sub>3</sub>	dBμV	89		89	
60 dB IMA <sub>3</sub>	dBμV				
LNB remote feeding max	mA	max. 600		max. 600	
Power consumption	mA	< 150		< 150	
Dimensions / Weight	mm/kg	120 x 144 x 35 / 0,6		125 x 90 x 35 / 0,3	

## AMPLIFIER 5-CABLE SYSTEM



- For analogue and digital signals
- Return path compatible
- **NVS 510:** Head- or backbone line amplifier for 5-cable systems
- **SV 435:** Head amplifier for 4-cable systems
- High gain 31 ... 38 dB, high output level
- Attenuator, 22 kHz generator
- **SV 528:** Head amplifier for 5-cable systems
- Terrestrial active/passive switchable
- Attenuator, 22 kHz generator

Type	NVS 510			SV 435		SV 528		
Article No.	1016 1200			1016 1621		1016 1201		
								
Description	head or backbone amplifier			head amplifier		head amplifier		
Frequency range	MHz	5 - 30	47 - 862	950 - 2200	950 - 2200	5 - 30	47 - 862	950 - 2200
Inputs		1		4	4	1		4
Outputs			5		4		5	
Gain: active-mode	dB	-1 ... -3	7 ... 10	7 ... 12	31 ... 38	-1 ... -3	26 ... 28	21 ... 28
passive-mode	dB	-	-	-	-	-1 ... -3	-1 ... -3	21 ... 28
Attenuator	dB	-	-	-	4 x 0...15	1 x 0...15		4 x 0...15
Noise figure	dB	-	5	9	9	-	8	
Output level								9
SAT 35 dB IMA <sub>3</sub>	dBμV			112	121			116
TERR 60 dB IMA <sub>3</sub> / IMA <sub>2</sub>	dBμV		112 / 95		-		114 / 95	
Isolation inputs	dB		> 25		> 25		> 25	
22 kHz tone			-		selectable		selectable	
Operating voltage		connector 3,5mm for external power supply (NG 1880) max. 800 mA			185 - 265 V~	185 - 265 V~		
Remote feeding LNB		13/18 VDC 300 mA, selectable 12 VDC, 250 mA at output for remote feeding of cascade devices			13/18 VDC 400 mA, selectable 12 VDC, 350 mA at output for remote feeding of cascade devices	13/18 VDC 500 mA, selectable 12 VDC, 450 mA at output for remote feeding of cascade devices		
Power consumption without LNB remote feeding		< 200 mA			13,7 W	11,7 W		
Connectors		F female			F female	F female		
Dimensions	mm	125 x 90 x 35			210 x 125 x 73	210 x 125 x 73		
Weight	kg	0,3			1,2	1,2		



## MULTISWITCH 9-CABLE SYSTEM

### Stand alone switch with power supply

- For selection of 8 satellite polarities
- Input for terrestrial signals
- Switching mode 13/18 V, 0/22 kHz, DiSEqC-signals
- For distribution of analogue and digital signals
- Active switch with low tap loss
- Connectors F female
- Metal housing with plastic side brackets
- Wide product range with models for 4, 6, 8, 12, and 16 subscribers



Type		MS 94 N		MS 96 N		MS 98 N	
Article No.		1016 1506		1016 1507		1016 1508	
Frequency range	MHz	47-862	950-2200	47-862	950-2200	47-862	950-2200
Inputs		1	8	1	8	1	8
Outputs subscriber		4		6		8	
Gain	dB	1 ... 3	0 ... 2	1 ... 3	0 ... 2	1 ... 3	0 ... 2
Isolation:	SAT/SAT		> 28		> 28		> 28
	SAT/TER	> 28		> 28		> 28	
	Subscriber	> 26	> 33	> 24	> 28	> 24	> 28
Output level:	35 dB IMA <sub>3</sub>	dB $\mu$ V 98		dB $\mu$ V 98		dB $\mu$ V 98	
	60 dB IMA <sub>3</sub>	92		92		92	
Operating voltage	V~	230		230		230	
Remote feeding LNB	mA	max. 500		max. 500		max. 500	
Power consumption without LNB remote feeding	W	8,0		8,0		8,0	
Dimensions	mm	345 x 120 x 80		345 x 120 x 80		345 x 120 x 80	
Weight	kg	1,6		1,6		1,6	

Type		MS 9012 N		MS 9016 N	
Article No.		1016 1509		1016 1510	
Frequency range	MHz	47-862	950-2200	47-862	950-2200
Inputs		1	8	1	8
Outputs subscriber		12		16	
Gain	dB	3 ... 5	-2 ... 3	0 ... 4	-2 ... 3
Isolation:	SAT/SAT		> 25		> 25
	SAT/TER	> 25		> 25	
	Subscriber	> 26	> 28	> 26	> 28
Output level:	35 dB IMA <sub>3</sub>	dB $\mu$ V 98		dB $\mu$ V 96	
	60 dB IMA <sub>3</sub>	92		92	
Operating voltage	V~	230		230	
Remote feeding LNB	mA	max. 500		max. 500	
Power consumption without LNB remote feeding	W	8,1		9,0	
Dimensions	mm	440 x 120 x 60		440 x 120 x 60	
Weight	kg	1,4		1,4	

## MULTISWITCH 9-CABLE CASCADABLE SYSTEM

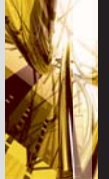


### Cascading switches, Cascade amplifier

- For selection of 8 satellite polarities + terrestrial signals
- Switching mode 13/18 V, 0/22 kHz, DiSEqC-signal
- For analogue and digital signals
- Connectors F female
- Metal housing with plastic side brackets
- Remote feed from the connected receivers
- **NVS 917:** Useful as head- or cascade amplifier.  
Powering via a plug-in power supply, contained in the scope of supply

Type		MS 94 K		MS 98 K	
Article No.		1016 1573		1016 1574	
Frequency range	MHz	47-862	950-2200	5-862	950-2200
Inputs		1	8	1	8
Outputs subscriber		4		8	
Outputs trunkline		9		9	
Gain output subscriber	dB	-3 ... 2	-4 ... 3	-3 ... 2	-5 ... 3
Through loss trunkline	dB	2 ... 3	1,5 ... 2	2,5 ... 3,5	2,5 ... 3,5
Isolation:			> 24		> 24
	SAT/SAT				
	SAT/TER		> 24		> 24
	Subscriber	> 24	> 24	> 24	> 24
Output level:			100		100
	35 dB IMA <sub>3</sub>				
	60 dB IMA <sub>3</sub>	dB $\mu$ V		dB $\mu$ V	
Remote feeding	mA	max. 600		max. 600	
Power consumption	mA	< 120		< 120	
Dimensions / Weight	mm/kg	287 x 125 x 51 / 1,1		287 x 153 x 51 / 1,4	

Type		NVS 917	
Article No.		1016 1638	
Frequency range	MHz	47-862	950-2200
Inputs		1	8
Outputs trunkline		1	8
Gain	dB	15	17
Attenuator	dB	0 ... 20	0 ... 20
Noise figure	dB	7	9
Isolation:			> 30
	SAT/SAT		
	SAT/TER		> 20
Output level:			105
	35 dB IMA <sub>3</sub>		
	60 dB IMA <sub>3</sub>	dB $\mu$ V	
Remote feeding		230 V~ / 18V, 1200 mA	
Power consumption	mA	max. 400	
Dimensions	mm	287 x 124 x 51	
Weight	kg	1,1	



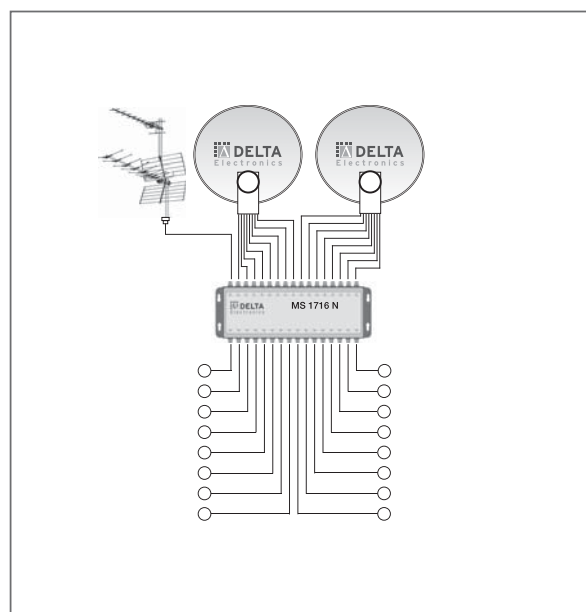
## MULTISWITCH 17-CABLE SYSTEM

### Stand alone switch with power supply

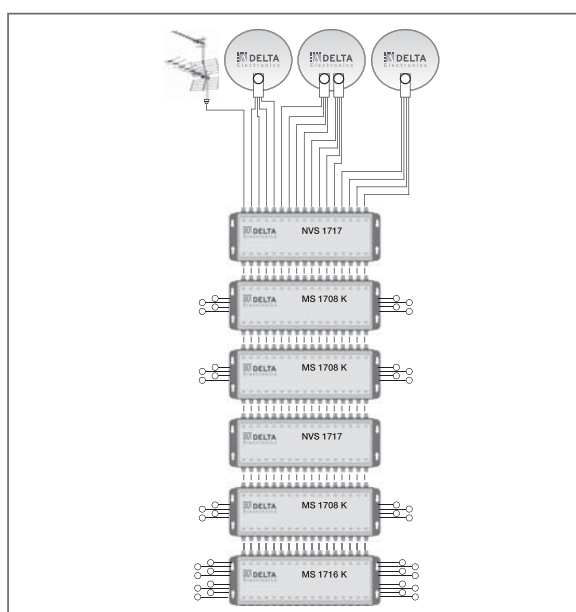
- For selection of 16 satellite polarities
- Input for terrestrial signals
- Switching mode 13/18 V, 0/22 kHz, DiSEqC-signals and Toneburst
- For distribution of analogue and digital signals
- Passive return path
- Metal housing with plastic side brackets
- Connectors F female
- Powering via a plug-in power supply, contained in the scope of supply



Type		MS 1704 N		MS 1708 N		MS 1716 N	
Article No.		5700 1265		5700 1257		5700 1258	
Frequency range	MHz	5-862	950-2200	5-862	950-2200	5-862	950-2200
Inputs		1	16	1	16	1	16
Outputs subscriber		4		8		16	
Gain	dB	-18	0	-22	0	-24	0
Isolation:	SAT/SAT		> 30		> 30		> 30
	SAT/TER	> 30		> 30		> 30	
	Subscriber	> 25	> 30	> 25	> 30	> 25	> 30
Output level: 35 dB IMA <sub>3</sub>	dBμV		100		100		100
Operating voltage	V~	230 / 15 V, 2 A		230 / 15 V, 2 A		230 / 15 V, 2 A	
Remote feeding LNB		max. 1,3 A via external power adapter		max. 1,3 A via external power adapter		max. 1,3 A via external power adapter	
Power consumption max. (by receiver)	mA	< 50		< 50		< 50	
Dimensions / Weight	mm/kg	370 x 105 x 55 / 1,8		370 x 105 x 55 / 1,8		360 x 205 x 55 / 2,8	



■ Distribution network for 16 subscribers with a stand alone switch



■ Cascade system for up to 40 subscribers



## MULTISWITCH 17-CABLE CASCADABLE SYSTEM



### Cascading switches, Cascade amplifier

- For selection of 16 satellite polarities + terrestrial signals
- Switching mode 13/18 V, 0/22 kHz, DiSEqC-signals and toneburst
- For distribution of analogue and digital signals
- LED-indications for voltage and remote feeding
- Metal housing with plastic side brackets
- Connectors F female
- Remote feed from the connected receivers
- **NVS 1717:** Useful as head- or cascade amplifier.  
Powering via a plug-in power supply, contained in the scope of supply

Type	MS 1704 K		MS 1708 K		MS 1716 K		
Article No.	5700 1261		5700 1259		5700 1260		
Frequency range	MHz	5-862	950-2200	5-862	950-2200	5-862	950-2200
Inputs		1	16	1	16	1	16
Outputs subscriber		4		8		16	
Outputs trunkline		17		17		17	
Gain	dB	-22	0	-24	0	-27	2
Through loss trunkline	dB	4	3,5	4	3,5	4	5
Isolation:	SAT/SAT	> 30		> 30		> 30	
	SAT/TER	> 30		> 30		> 30	
	Subscriber	> 25	> 30	> 25	> 30	> 25	> 30
Output level:	35 dB IMA <sub>3</sub>	100		100		100	
Remote feeding	mA	max. 1300		max. 1300		max. 1300	
Power consumption max. (by receiver)	mA	< 50		< 50		< 50	
Dimensions	mm	370 x 105 x 55		370 x 105 x 55		370 x 205 x 55	
Weight	kg	1,8		1,8		2,8	

Type	NVS 1717			
Article No.	5700 1262			
Frequency range	MHz	5-65	88-862	950-2200
Inputs		1		16
Outputs subscriber		1		16
Gain	dB	4	16	14 ... 20
Attenuator	dB	0 ... 10		0 ... 10
Equalizer	dB	0 ... 10		6
Noise figure	dB	7		9
Isolation:	SAT/SAT			> 25
	SAT/TER	> 30		
Output level:	35 dB IMA <sub>3</sub>			110
	60 dB IMA <sub>3</sub>	105		
Power consumption		230 V~ / 15 V, 2 A (Remote feeding LNB max. 1,2 A)		
Remote feeding	W	12 (without LNB remote feeding)		
Dimensions / Weight	mm/kg	370 x 105 x 55 / 2,8		



## MULTISWITCHES PROFI-LINE



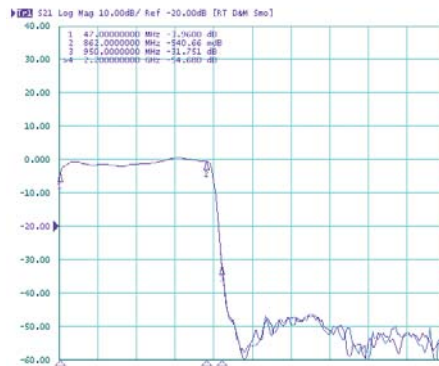
### State-of-the-art technology

The newly developed "Profi-Line" switches incorporate excellent mechanical construction and electronics. The implementation in a die-cast housing enables optimal heat sink, which leads to a considerable life-time extension. The very good reduction of heat and the use of a switch-mode power supply allow this switch to be used in high temperature environments.

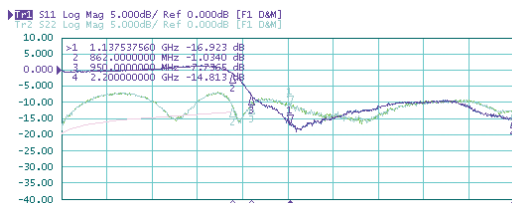
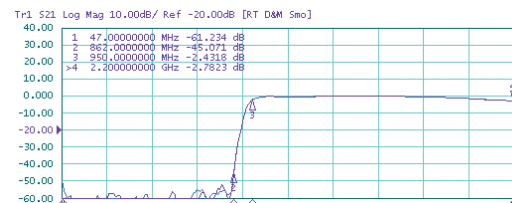
A complete program for 5- and 9-cable systems, as single or cascading switches, is also available in this series. EMV-Class A (EN 50083-2). It's further features speak for themselves.

### The advantages at a glance

- Pay Selection Switches - IF-signal for each subscriber selectable
- High selectivity with double filters for SAT-IF and terrestrial signals
- High SAT output level
- Low tap loss for Satellite-IF and terrestrial signals
- Excellent linearity and high return loss
- 22 kHz tone selectable
- Level attenuator for terrestrial input
- Terrestrial active/passive switchable, return path possible
- Switch-mode power supply with LED control
- EMV-Class A (EN 50083-2)



The use of double filters guarantee a very steep filter flank





## MULTISWITCH “PROFI-LINE” 5-CABLE SYSTEM

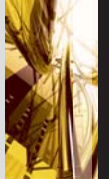


### Stand alone switch with power supply

- For selection of 4 satellite polarities + terrestrial signals
- Switching mode 13/18 V, 0/22 kHz
- High selection with double filters for SAT-IF and terrestrial signals
- Low tap loss for SAT-IF and terrestrial signals
- Excellent linearity and high return loss
- 22 kHz generator selectable
- Terrestrial active/passive switchable
- Return path 5-30 MHz (5-65 MHz on request)
- Switch mode power supply with LED-control
- Die-cast housing Class A

Type	MSD 56 N		MSD 58 N		MSD 5012 N		
Article No.	1016 1511		1016 1512		1016 1479		
Frequency range	MHz	47-862	950-2200	47-862	950-2200	47-862	950-2200
Inputs		1	4	1	4	1	4
Outputs / Pay Selection Switch		6 / 6		8 / 8		12 / 12	
Switching tone, selectable		22 kHz / 0,6 Vss		22 kHz / 0,6 Vss		22 kHz / 0,6 Vss	
Gain active / passive	dB	2...4 / -20	0 ... -2	2...4 / -20	0 ... -2	-2...-4 / -25	0 ... -3
Attenuator	dB					0 ... 20	
Isolation:	SAT/SAT		> 26		> 26		> 26
	SAT/TER		> 35		> 35		> 40
	Subscriber	> 24	> 30	> 24	> 30	> 24	> 30
Output level:	35 dB IMA <sub>3</sub>		98		98		96
	60 dB IMA <sub>3</sub>	88		88		88	
Operating voltage	V~	185 - 265		185 - 265		185 - 265	
Remote feeding LNB	mA	max. 400		max. 400		max. 600	
Power consumption (without LNB)	W	7,5		7,5		8,5	
Dimensions / Weight	mm/kg	220 x 150 x 70 / 2,0		220 x 150 x 70 / 2,0		380 x 150 x 70 / 2,9	

Type	MSD 5016 N		MSD 5020 N		
Article No.	1016 1480		1016 1481		
Frequency range	MHz	47-862	950-2200	47-862	950-2200
Inputs		1	4	1	4
Outputs / Pay Selection Switch		16 / 16		20 / 20	
Switching tone, selectable		22 kHz / 0,6 Vss		22 kHz / 0,6 Vss	
Gain active / passive	dB	2...-4 / -26	0 ... -3	-2...-4 / -26	0 ... -3
Attenuator	dB	0 ... 20		0 ... 20	
Isolation:	SAT/SAT		> 26		> 26
	SAT/TER		> 40		> 40
	Subscriber	> 24	> 30	> 24	> 30
Output level:	35 dB IMA <sub>3</sub>		96		96
	60 dB IMA <sub>3</sub>	88		88	
Operating voltage	V~	185 - 265		185 - 265	
Remote feeding LNB	mA	max. 600		max. 600	
Power consumption (without LNB)	W	8,5		9,5	
Dimensions / Weight	mm/kg	380 x 150 x 70 / 2,9		380 x 150 x 70 / 3,0	



## MULTISWITCH “PROFI-LINE” 9-CABLE SYSTEM

Stand alone switch / cascading switch with power supply

- || For selection of 8 satellite polarities and terrestrial
- || Switching mode 12/18 V, 0/22 kHz, DiSeqC-signals and Toneburst
- || 22 kHz generator selectable
- || High selection with double filters for SAT-IF and terrestrial signals, terrestrial active/passive switchable
- || Low tap loss for SAT-IF and terrestrial signals
- || Return path 5-30 MHz, (5-65 MHz on request)
- || Switch mode power supply with LED-control, die-cast housing Class A
- || **MSD 98 NK:** Cascadable head switch for the current supply of further switches



Type	MSD 94 N		MSD 96 N		MSD 98 N		
Article No.	1016 1575		1016 1576		1016 1577		
Frequency range	MHz	47-862	950-2200	47-862	950-2200	47-862	950-2200
Inputs		1	8	1	8	1	8
Outputs / Pay Selection Switch		4 / 4		6 / 6		8 / 8	
Switching tone, selectable		22 kHz / 0,6 Vss		22 kHz / 0,6 Vss		22 kHz / 0,6 Vss	
Gain active / passive	dB	1...2 / -20	-3 ... -6	1...2 / -20	-3 ... -6	1...-2/ -20	-3 ... -6
Attenuator	dB	0 ... 20				0 ... 20	
Isolation:	SAT/SAT	dB	> 26	> 26	> 26	> 26	> 26
	SAT/TER	dB	> 40	> 40	> 40	> 40	> 40
	Subscriber	dB	> 24	> 40	> 24	> 40	> 40
Output level:	35 dB IMA <sub>3</sub>	dB $\mu$ V	110	110	110	110	110
	60 dB IMA <sub>3</sub>	dB $\mu$ V	90	90	90	90	90
Operating voltage	V~	185 - 265		185 - 265		185 - 265	
Remote feeding LNB		max. 800 mA, 13/18 V		max. 800 mA, 13/18 V		max. 800 mA, 13/18 V	
Power consumption (without LNB)	W	4,5		4,5		4,5	
Dimensions / Weight	mm/kg	380 x 150 x 70 / 2,7		380 x 150 x 70 / 2,7		380 x 150 x 70 / 2,7	

Type	MSD 98 NK		
Article No.	1016 1578		
Frequency range	MHz	47-862	950-2200
Inputs		1	8
Outputs / Pay Selection Switch		8 / 8	
Gain active / passive	dB	-10...-12 / -25	-3 ... -6
Attenuator	dB	0 ... 20	
Outputs trunkline		9	
Through loss trunkline	dB	1 ... 3	1,5 ... 4,9
Isolation:	SAT/SAT	dB	> 26
	SAT/TER	dB	> 40
	Subscriber	dB	> 40
Output level	dB $\mu$ V	90 (60 dB IMA <sub>3</sub> )	110 (35 dB IMA <sub>3</sub> )
Operating voltage	V~	185 - 265	
Remote feeding		LNB = max. 800 mA, 13/18 V / cascading switch = max. 900 mA, 12 V	
Power consumption (without LNB)	W	4,5	
Dimensions / Weight	mm/kg	380 x 150 x 70 / 2,7	

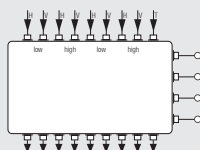
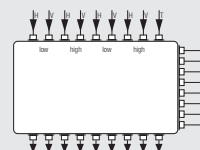


## MULTISWITCH "PROFI-LINE" 9-CABLE CASCADABLE SYSTEM

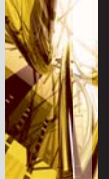


### Cascading switches

- For selection of 8 satellite polarities and terrestrial
- Switching mode 12/18 V, 0/22 kHz, DiSEqC-signals and Toneburst
- High selection with double filters for SAT-IF and terrestrial signals
- Low tap loss for SAT-IF and terrestrial signals
- Excellent linearity and high return loss
- Terrestrial active/passive switchable
- Return path 5-30 MHz, (5-65 MHz on request)
- Switch mode power supply with LED-control
- Die-cast housing Class A
- Up to 9 switches cascadable

Type		MSD 94 K		MSD 98 K	
Article No.		1016 1579		1016 1580	
					
Frequency range	MHz	47 - 862	950 - 2200	47 - 862	950 - 2200
Return path, passive	MHz	5 - 30		5 - 30	
Inputs		1	8	1	8
Outputs subscriber		4		8	
Outputs trunkline		9		9	
Switching modes		12/18 V, 0/22 kHz, DiSEqC, Toneburst		12/18 V, 0/22 kHz DiSEqC, Toneburst	
Pay Selection Switch		4		8	
Gain subscriber					
Active	dB	-10 ... -12	-3 ... -6	-10 ... -12	-3 ... -6
Passive	dB	-25		-25	
Through loss trunkline	dB	1 ... 3	1,5 ... 4,9	1 ... 3	1,5 ... 4,9
Isolation					
SAT/SAT	dB		> 26		> 26
SAT/TERR	dB	> 40		> 40	
Subscriber	dB	> 24	> 40	> 24	> 40
Output level					
SAT 35 dB IMA <sub>3</sub>	dBμV		110		110
TERR 60 dB IMA <sub>3</sub>	dBμV	90		90	
Operating voltage		12 V DC / max. 900 mA		12 V DC / max. 900 mA	
Power consumption	mA	95		95	
Connectors		F female		F female	
Dimensions	mm	300 x 150 x 70		300 x 150 x 70	
Weight	kg	2,4		2,4	

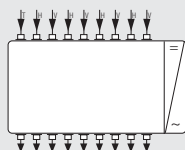




## AMPLIFIER “PROFI-LINE” 9-CABLE CASCADABLE SYSTEM

- || Useful as head- or cascade amplifier in 9-cable-systems
- || Return path passive, 5-30 MHz
- || Attenuators for SAT-IF and terrestrial signals
- || Highly efficient switch mode power supply
- || High power for remote feeding of LNB and cascadable switches
- || LNB remote feeding and backwards cascadable switches selectable
- || LED-indication
- || Die-cast housing Class A



Type		NVD 918 N		
Article No.	1016 1606			
				
Frequency range	MHz	5-30 *	47-862	950-2200
Inputs			1	8
Outputs			1	8
Gain	dB	- 1.5	15 ... 18	16 ... 18
Attenuator	dB		0 ... 20	0 ... 20
Interstage equalizer	dB		-5	
Linearity	dB		± 1,0	± 1,0
Output level				
35 dB IMA <sub>3</sub>	dB $\mu$ V			117
60 dB IMA <sub>2</sub>	dB $\mu$ V		112	
60 dB IMA <sub>3</sub>	dB $\mu$ V		117	
Noise figure	dB		7	7
Isolation				
SAT V/H	dB			> 25
SAT/TER	dB		> 25	
Outputs			> 25	
Operating voltage	V~		185-265	
Operating voltage LNB		12 V / 530 mA, 18 V 800 mA (max. current)		
Cascading switches		12 V and/or 18 V, selectable		
		12 V selectable at inputs and/or outputs, 2x vertical low		
Power consumption	W	10 (without LNB)		
Connectors		F female		
Dimensions	mm	368 x 150 x 70		
Weight	kg	2,9		

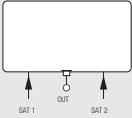
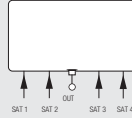
\* 5-65 MHz on request



## DiSEqC-SWITCHES



- SAT-IF switch, controlled by DiSEqC / Toneburst
- Short-circuit protected
- Connectors F female
- Additional protection by means of plastic housing for outdoor installation

Type		SUS 21 WP	SUS 41 WP
Article No.		1016 1598	1016 1596
			
Frequency range	MHz	950 - 2200	950 - 2200
Inputs		2	4
Outputs		1	1
Switching modes		DiSEqC A/B, Toneburst	DiSEqC A/B/C/D Toneburst
Through loss	dB	2	4
Isolation SAT/SAT	dB	> 22	> 28
Power supply		Remote feeding via output, DC- pass for LNB- remote feeding, max. 500 mA	
Power consumption	mA	18	18
Connectors		F female	F female
Dimensions / Weight	mm/kg	110 x 87 x 41 / 0,1	130 x 130 x 50 / 0,1



## UNIVERSAL PLUG-IN POWER SUPPLY

- High power plug-in power supply 18 V
- For terminal switch MS 54 and amplifier NVS 510, channel router SUM 514 K und SUM 516 K

Type		NG 1880
Article No.		1016 1103
Operating voltage	V~	230
Output voltage	V	18 / stabilized
Output current max	mA	800
Power consumption	W	14,4
Connectors		3,5 mm jack
Dimensions	mm	130 x 80 x 68
Weight	kg	1,0

## SAT-IF COMBINER

- || To combine or separate terrestrial and SAT-IF signals
- || Metal housing with plastic side brackets
- || **ESW 54:** For Quattro-Switch-LNB
- || Active combiner with low through loss
- || Terrestrial active/passive switchable
- || Return path compatible



Type		SW 02	SW 22	ESW 54
Article No.		1016 1033	1016 1041	1016 1169
Frequency range	MHz	47-862   950-2200	47-862   950-2200	47-862   950-2200
Inputs		1   1	1   2	1   4
Outputs		1	2	4
Gain: active	dB			-4 ... -6
Gain: passive	dB			-12 ... -14
Output level 60 dB IMA <sub>3</sub>	dBμV			88
Through loss	dB	1 ... 3	2 ... 4	
Isolation SAT/TER	dB	> 30	> 30	
Isolation				
Power supply				through external power supply
Remote feeding LNB		max. 500	max. 500	max. 500
Power consumption	mA			< 60 (12...18 V=)
Connectors		F female	F female	F female
Dimensions	mm	90 x 70 x 27	115 x 90 x 40	110 x 90 x 35
Weight	kg	0,1	0,2	0,3



## UNICABLE- DISTRIBUTION SYSTEMS



This new kind of single cable solution uses digital technology and offers up to 16 subscribers per appliance, full access to 4 or 8 satellite polarizations.

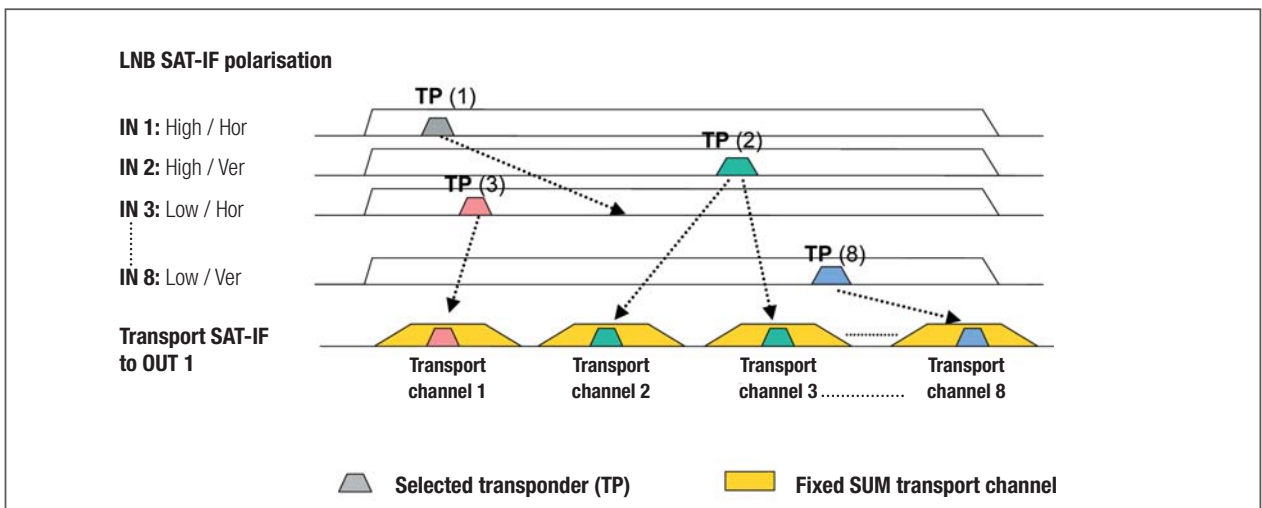
Tree networks can be easily fed, without the need of installing a complex star distribution to each subscriber.

The converters are controlled by each subscriber via DiSEqC, with suitable receivers, e.g. SDR 510 U, SDR 610 PVR or SDR 7200 PVR (see page 54-55).

### The advantages at a glance

- ▮ Unlimited digital program diversity via just one cable
- ▮ Ideal for the expansion or alteration of SAT-IF and CATV systems, in feed through technology (tree distribution)
- ▮ Low installation effort, as no star distribution necessary
- ▮ Future-safe, even in case of satellite or transponder change
- ▮ Compact unit for up to 2 x 8 subscribers
- ▮ Expandable to a multiple of 8 subscribers through SAT-IF distribution on input to several SUM units

### Principle of function



The new single cable solution operates according to the channel-router principle. Here, a single satellite channel is transferred to a specific receiver. The satellite transponder is also routed to the receiver. A specific SAT-IF frequency, with all comprising programs is filtered out and converted to the transponder frequency. This signal is then allocated uniquely to a respective receiver.

Each subscriber decides independently which satellite channel must be converted to his own transponder frequency. During channel switching, the receiver transmits the desired program adjustment to the electronics of the channel router and immediately receives its own digital packet.



## SAT-CHANNEL ROUTERS SINGLE UNITS

- || SAT-IF-converter for single-cable solutions
- || Providing of up to 8 or 2 x 8 subscribers
- || Safe when changing satellites or transponders
- || The converter is managed by a special DiSEqC-version, connected satellite receiver must get an update
- || Input for terrestrial antenna
- || Low phase noise at the SAT-IF conversion
- || LED-indication
- || Connectors F female



Product range / Type	SUM 518	SUM 918	SUM 928
Article No.	5700 1351	5700 1380	1016 1676
SAT-IF inputs	4	8	8
Input terrestrial/CATV	1	1	1
Outputs	1	1	2
No. of connectable receivers	8	8	2 x 8

Technical data (SUM 518, SUM 918 and SUM 928)			
Frequency range	MHz	5 - 30	47 - 862
Gain SUM 518, SUM 918	dB	-4	-3* / 19 ... 23 (slope)
Gain SUM 928	dB	-7	-6* / 16 ... 20 (slope)
Linearity	dB	± 1,0	± 1,0
Attenuator	dB		0 ... 20
Phase noise	dBc/Hz		-85 (bei 10 kHz)
Switching mode		DiSEqC 1.1 Unicable Technology Ready (EN 50494)	
SAT-channel subscriber	Ch. 1		1284 MHz
	Ch. 2		1400 MHz
	Ch. 3		1516 MHz
	Ch. 4		1632 MHz
	Ch. 5		1748 MHz
	Ch. 6		1864 MHz
	Ch. 7		1980 MHz
	Ch. 8		2096 MHz
Output level			
2nd order DIN 45004A1	dBµV	110	
3rd order DIN 45004B	dBµV	113	114
Isolation:	SAT/SAT	dB	> 26
	SAT/TERR	dB	> 40
	Output 1/Output 2	dB	> 26
Operating voltage	V~	185 - 265	
Remote feeding LNB		13/18 V, 250 mA je LNB / 22 kHz selectable	
Power consumption	W	12 (SUM 518/SUM 918) / 18 (SUM 928)	
Operating temperature	°C	-20 ... +55	
Dimensions / Weight	mm/kg	370 x 150 x 70 / 2,9	

\* switched to passive mode



## SAT-CHANNEL ROUTERS CASCADABLE UNITS



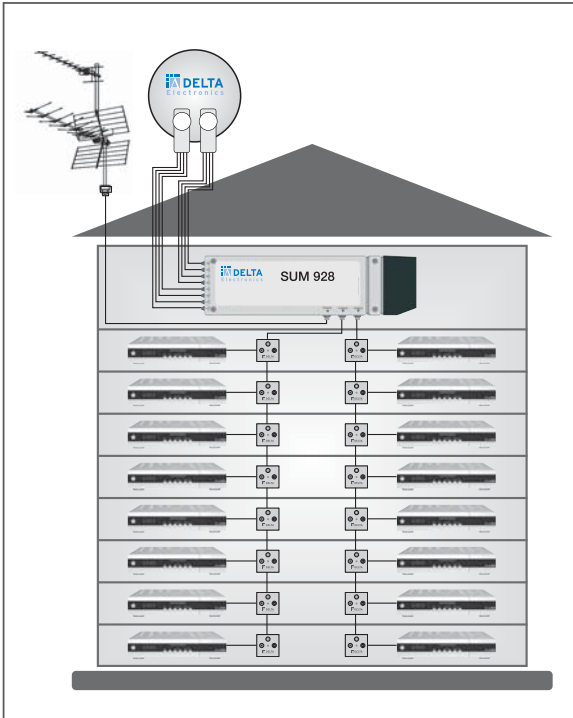
- SAT-IF-converter for single-cable solutions
- Cascadable unit for connection of 4 or 6 receivers
- For the reception of 1 SAT orbit position
- Safe when changing satellites or transponders
- The converter is managed by a special DiSEqC-version, connected satellite receiver must get an update
- Input for terrestrial antenna
- Low phase noise at the SAT-IF conversion
- Connectors F female

Product range / Type	SUM 514 K	SUM 516 K
Article No.	5700 1379	1016 1380
SAT-IF inputs	4	4
Input terrestrial/CATV	1	1
Outputs trunkline	5	5
Outputs subscribers	1	1
No. of connectable receivers	4	6

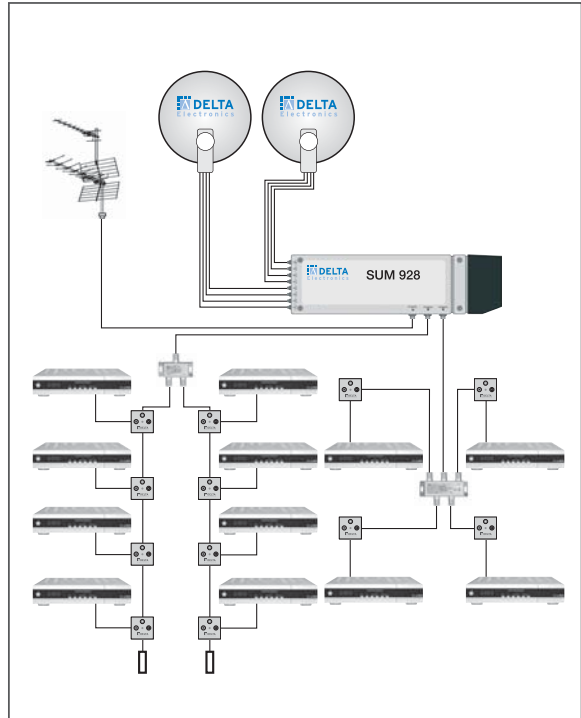
Technical Data (SUM 514 K, SUM 516 K)		SUM 514 K	SUM 516 K
Frequency range	MHz	5 - 862	950 - 2200
Tap loss subscriber	dB	-5	+1 ... -3
Trough loss trunkline	dB	4,5	1,5
Linearity	dB	± 1,0	± 2,5
Phase noise	dBc/Hz		-85 (bei 10 kHz)
Switching mode		DiSEqC 1.1 Unicable Technology Ready (EN 50494)	
SAT-channel subscriber	Ch. 1		1284 MHz
	Ch. 2		1400 MHz
	Ch. 3		1516 MHz
	Ch. 4		1632 MHz
	Ch. 5		1748 MHz (SUM 516 K)
	Ch. 6		1864 MHz (SUM 516 K)
Input level each SAT-IF input	dB $\mu$ V		max. 95
Isolation:			
SAT/SAT (trunk line)	dB		> 30
SAT/TV (trunk line)	dB	> 35	> 35
Polarisation	dB		> 28
Operating voltage	V~	18 V~, 800 mA, via plug-in power supply NG 1880 (only for stand-alone operation)	
Remote current each trunk line	A	1	
Power consumption each subscriber	mA	< 180 (at remote feeding from the connected receiver)	
Operating temperature	°C	-20 ... +55	
Connectors		F female	
Dimensions	mm	125 x 90 x 35	
Weight	kg	0,3	



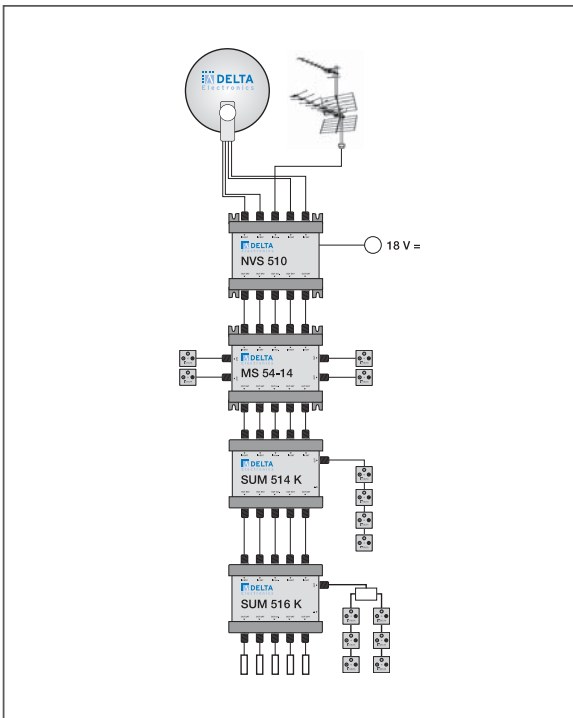
## UNICABLE- INSTALLATION EXAMPLES



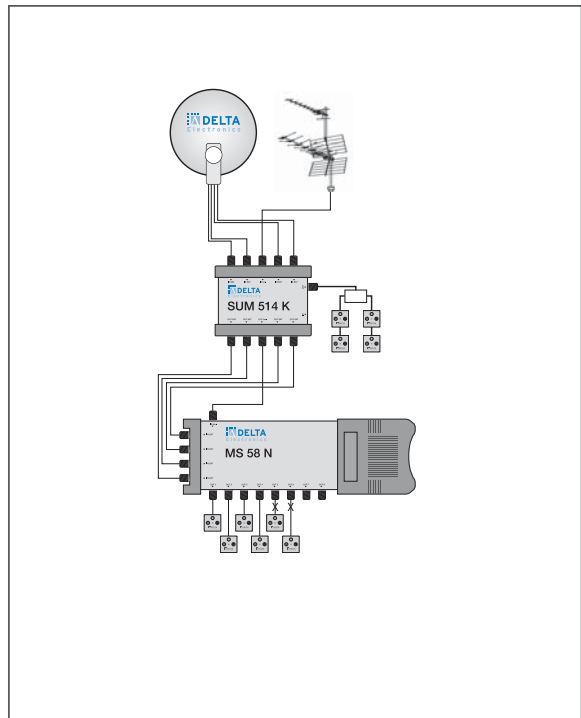
|| Structure of the digital single cable solution in uni-cable technology



|| Reception of 2 satellites and 8 SAT-IF lines via a network with SUM 928



|| Floor star distribution with intermediary cascade units



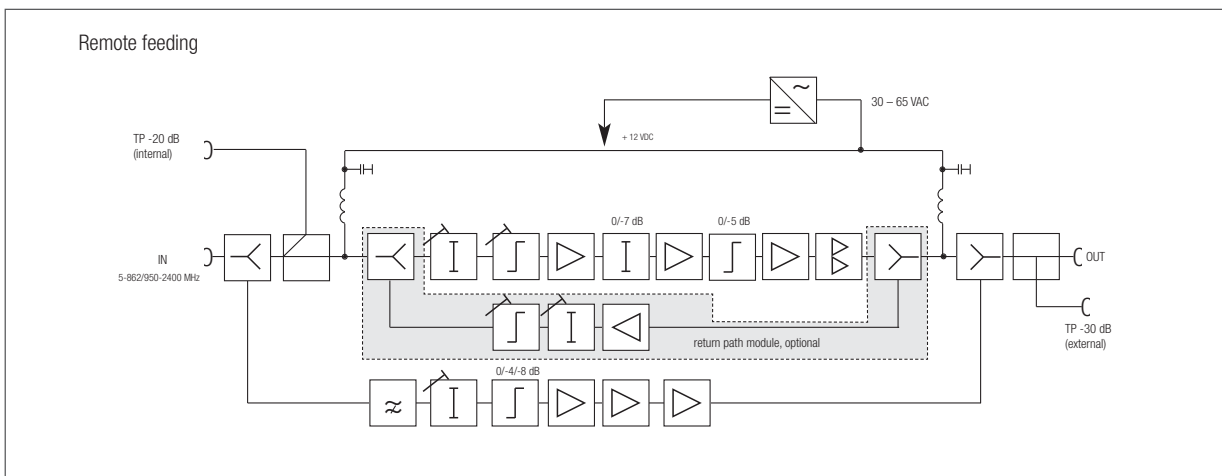
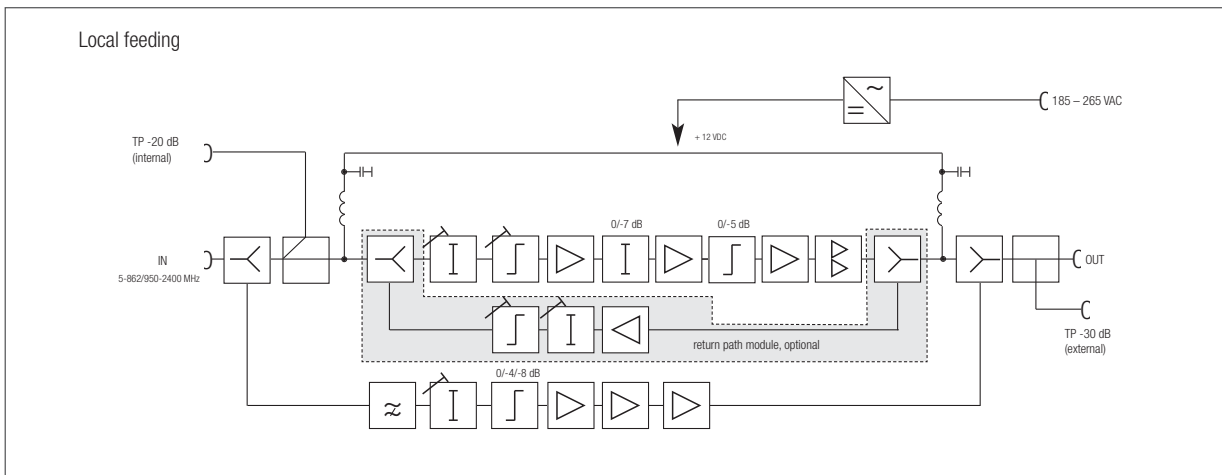
|| Expansion of multi-switch with a cascade, e.g. for re-fitting of a PVR receiver



## COMBINED SAT-IF/CATV SPLITBAND AMPLIFIER "PROFI-LINE"



- Die cast housing, IP 50
- Splitband technology, 5-862/950-2400 MHz
- Useable as broadband post amplifier
- GaAs-FET push-pull stages
- Flexible return path modules, active or passive
- Excellent linearity
- For local and remote feeding
- Remote current 2,7 A
- Input and output test points
- Highly efficient switch mode power supply
- F-Connectors or 5/8"



■ Plug-in slots for optional return path modules



## COMBINED SAT-IF/CATV SPLITBAND AMPLIFIER "PROFI-LINE"

- || Broadband post amplifier in splitband technology
- || Die-cast housing IP 50, Class A (EN 50083-2)
- || Frequency range 5-862/950-2400 MHz
- || High gain 34/41 dB
- || GaAS-FET push-pull stages for high output level
- || Plug-in slot for active or passive return path modules (page 39)
- || Slope frequency point selectable, 606/862/2400 MHz
- || Excellent linearity up to 2400 MHz
- || Testpoint at input and output
- || Highly efficient switch mode power supply
- || Remote current 2,7 A, integrated surge protection



Type	LVD 3440		LVD 3440 RP		
	1016 1389		1016 1390		
Article No.	1016 1389		1016 1390		
Frequency range	MHz	47 - 862	950 - 2400	47 - 862	950 - 2400
Slope frequency point	MHz	606 / 862	2400	606 / 862	2400
Slots for return path		1	1	1	1
Gain	dB	34 ± 1,0	40 ± 1,0	34 ± 1,0	40 ± 1,0
Interstage attenuation		5 dB selectable	–	5 dB selectable	–
Interstage equalization		7 dB selectable	4 dB selectable	7 dB selectable	4 dB selectable
Noise figure	dB	7	8	7	8
Linearity	dB	± 0,8	± 1,5	± 0,8	± 1,5
Attenuator	dB	0 ... 20	0 ... 20	0 ... 20	0 ... 20
Equalizer	dB	0 ... 18	0/4	0 ... 18	0/4
Output level					
IMA <sub>3</sub>	dBμV	122 (60 dB)	120 (35 dB)	122 (60 dB)	120 (35 dB)
IMA <sub>2</sub> >60 dB	dBμV	116	–	116	–
CSO >60 dB/42 Ch.	dBμV	104	–	104	–
CTB >60 dB/42 Ch.	dBμV	104	–	104	–
Return loss	dB	18 dB ≥ 47 MHz	10 dB	18 dB ≥ 47 MHz	10 dB
Input / output		-1,5 dB/Octave		-1,5 dB/Octave	
Isolation SAT-UHF/VHF	dB	> 35		> 35	
Test point input		-20 dB (F-connector, internal)		-20 dB (F-connector, internal)	
Test point output		-30 dB (F-connector, external)		-30 dB (F-connector, external)	
Connectors		F-connector or 5/8"		F-connector or 5/8"	
Operating voltage	V~	185 - 265		30 - 65	
Remote current max	A	2,7		2,7	
Power consumption	W	13,2		13,2	
Dimensions	mm	210 x 122 x 70		210 x 122 x 70	
Weight	kg	1,2		1,2	

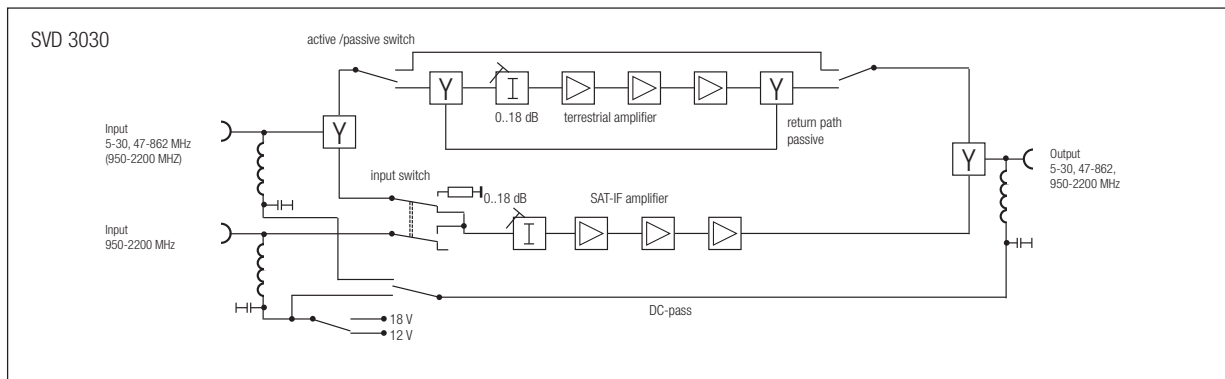


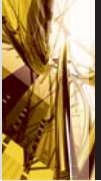
# UNIVERSAL SAT-IF AMPLIFIER



- Insertion-/splitband post amplifier
- Through a modern switching technology useful as insertion- or splitband post amplifier
- Frequency range 47-862/950-2200 MHz
- Return path 5-30 MHz, passive
- With attenuator for SAT/TER
- Terrestrial active/passive switchable
- Fix slope at SAT-IF
- Highly efficient switch mode power supply, LED indication
- High power for remote feeding of LNB
- LNB- voltage 13/18 V selectable
- Die-cast housing IP 50, Class A (EN 50083-2)

Type	SVD 3030			SVD 3834 E			
Article No.	1016 1601			5700 1365			
Frequency range	MHz	5 - 30	47 - 862	950 - 2200	5 - 30	47 - 862	950 - 2200
Inputs		1		1	1		1
Outputs			1		1		
Gain: active	dB	- 2	30	21 ... 30	- 2	34	32 ... 39
passive	dB	-2	- 2		-2	- 2	
Attenuator	dB		0 ... 20	0 ... 20		0 ... 20	0 ... 20
Equalizer	dB					0 ... 18	
Noise figure / Linearity	dB		7 / ± 1,0	7 / ± 1,0		7 / ± 1,0	7 / ± 1,5
Output level							
SAT 35 dB IMA <sub>3</sub>	dBµV			116			121
TERR 60 dB IMA <sub>3</sub>	dBµV		112			117	
Isolation							
SAT V / SAT H	dB			> 35			> 35
SAT / TERR	dB		> 35			> 35	
Operating voltage	V~	185 - 265			185 - 265		
Remote feeding LNB		400 mA/12V, 350 mA/18 V with jumper selectable			300 mA/12V, 250 mA/18 V with jumper selectable		
DC-pass		max. 400 mA			max. 400 mA		
Power consumption	W	9,5			10,5		
Connectors		F female			F female		
Dimensions	mm	210 x 122 x 70			210 x 122 x 70		
Weight	kg	1,2			1,2		



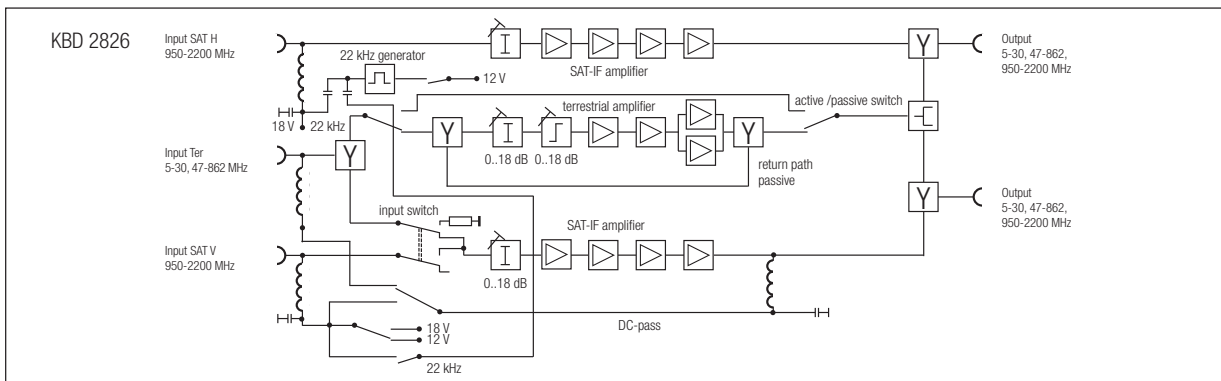


# UNIVERSAL SAT-IF AMPLIFIER

- || Insertion-/splitband post amplifier, 2-cable system
- || Through a modern switching technology useful as insertion- or splitband post amplifier for 2 polarisations
- || Frequency range 47-862/950-2200 MHz
- || Return path 5-30 MHz, passive
- || With attenuator for SAT/TER
- || Terrestrial active/passive switchable
- || Fix slope at SAT-IF
- || Highly efficient switch mode power supply, LED indication
- || High power for remote feeding of LNB
- || LNB-voltage 13/18 V selectable
- || Die-cast housing IP 50, Class A (EN 50083-2)



Type		KBD 2826			KBD 3830 E		
Article No.		1016 1581			5700 1364		
Frequency range	MHz	5 - 30	47 - 862	950 - 2200	5 - 30	47 - 862	950 - 2200
Inputs		1			1		
Outputs		2			2		
Gain: active	dB	- 3	26	21 ... 29	- 3	31	32 ... 39
passive	dB	-3	- 3		-3	- 3	
Attenuator	dB		0 ... 20	2 x 0 ... 20		0 ... 20	2 x 0 ... 20
Equalizer	dB					0 ... 18	
Noise figure / Linearity	dB		7 / ± 1,0	7 / ± 1,0		7 / ± 1,0	7 / ± 1,5
Output level							
SAT 35 dB IMA <sub>3</sub>	dBµV			116			121
TERR 60 dB IMA <sub>3</sub>	dBµV		112			114	
Isolation							
SAT V / SAT H	dB			> 35			> 35
SAT / TERR	dB		> 35			> 35	
Operating voltage	V~	185 - 265			185 - 265		
Remote feeding LNB		2 x 250 mA with jumper selectable			2 x 250 mA with jumper selectable		
DC-pass		max. 400 mA			max. 400 mA		
Power consumption	W	10,5			11,5		
Connectors		F female			F female		
Dimensions	mm	210 x 122 x 70			210 x 122 x 70		
Weight	kg	1,2			1,2		



## SAT-IF INLINE AMPLIFIER



- Broadband amplifier for analogue and digital signals
- Frequency range up to 2200 MHz
- With attenuator for perfect level adjustments
- Remote powered
- DC- pass for LNB remote feeding
- Metal housing

Type		NV 1824 D
Article No.		5700 1303
Frequency range	MHz	47 - 2200
Inputs		1
Outputs		1
Gain	dB	18 ... 24
Linearity	dB	± 0,5
Equalizer	dB	6
Attenuator	dB	0 ... 10
Output level : SAT 35 dB IMA <sub>3</sub>	dB $\mu$ V	116
TERR 60 dB IMA <sub>3</sub>	dB $\mu$ V	113
Remote feeding voltage	V	12 ... 18 (via SAT-receiver)
Power consumption	mA	< 70
Current transit max.	A	1
Connectors		F female
Dimensions	mm	43,5 x 23,3 x 22
Weight	kg	0,04