

MULTISWITCHES PROFI-LINE



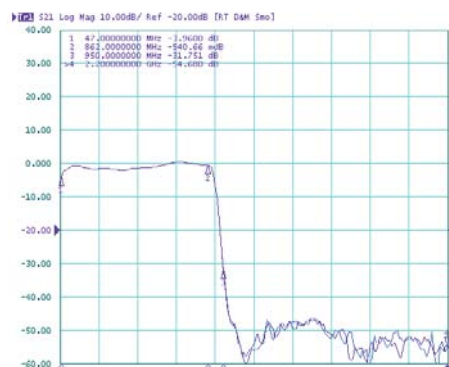
State-of-the-art technology

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.

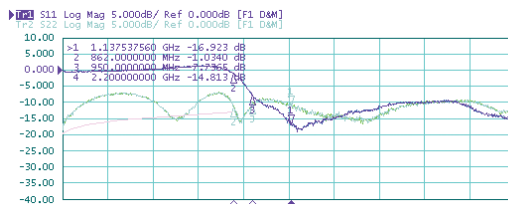
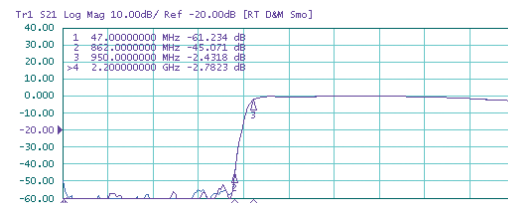
A complete program for 5- and 9-cable systems, as single or cascading switches, is also available in this series. EMV-Class A (EN 50083-2). It's further features speak for themselves.

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	dB		> 26		> 26		> 26
SAT/TER	dB	> 35		> 35		> 40	
Subscriber	dB	> 24	> 30	> 24	> 30	> 24	> 30
Output level:							
35 dB IMA ₃	dB μ V		98		98		96
60 dB IMA ₃	dB μ V	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	dB		> 26		> 26
SAT/TER	dB	> 40		> 40	
Subscriber	dB	> 24	> 30	> 24	> 30
Output level:					
35 dB IMA ₃	dB μ V		96		96
60 dB IMA ₃	dB μ V	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
SAT/TER	dB	> 40		> 40		> 40	
Subscriber	dB	> 24	> 40	> 24	> 40	> 24	> 40
Output level:							
35 dB IMA ₃	dBμV	110		110		110	
60 dB IMA ₃	dBμV	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	> 24	> 40
Output level	dBμV	90 (60 dB IMA ₃)	110 (35 dB IMA ₃)
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	

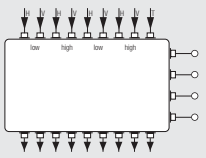
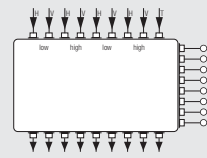


MULTISWITCH "PROFI-LINE" 9-CABLE CASCADABLE SYSTEM



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 ₃	dBμV	110		110	
TERR 60 dB IMA ₃	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	