

ASTRO Multi Switches

HIGH CLASS COMPACT MULTI SWITCHES 4 SAT-INPUTS + 1 TERRESTRIAL



- Terrestrial input, passive or shiftable FM active, for direct connection of an antenna
- Separate level controllers for every SAT-input
- LNB-supply selectable 12V / 18V / 22kHz
- Energy saving switching-power supply, 0,5W power consumption in stand-by mode
- LED control per subscriber and for output current Monitoring (short-circuit proof)
- Optional SVP 20 crowbar

TYP		AMS 506 ECOSWITCH	AMS 508 ECOSWITCH	AMS 512 ECOSWITCH
SAT RANGE				
Frequency range	[MHz]	950-2150		
Gain	[dB]	2 ± 2,5		
Maximum output level	[dBμV]	Typ. 105 for 35dB IMA2 and IMA3 accord. EN 50083-3		
SAT-input attenuator	[dB]	0-10		
ISOLATION				
SAT-input / SAT-input; SAT / Terrestrial	[dB]	Typ. 40, min. 36		
Receiver / Receiver	[dB]	Typ. 30, min. 25		
RETURN LOSS				
SAT-LNB Inputs	[dB]	Typ. 14, min. 10		
Receiver Outputs	[dB]	Typ. 10, min. 6		
TERRESTRIAL RANGE PASSIVE				
Frequency range	[MHz]	5-862		
Tap loss *	[dB]	21 ± 1,5	21 ± 1,5	24 ± 1,5
Maximum input level	[dBμV]	Typ. 120, accord. EN 50083-2		
FM RANGE AMPLIFIER, BANDPASS FILTERED FOR DIRECT CONNECTION OF AN FM AERIAL				
Frequency range	[MHz]	87,5-108		
coupling out gain of receiver	[dB]	12 ± 1,5	12 ± 1,5	9 ± 1,5
FM attenuator	[dB]	0-20		
Maxim. output level of receiver **	[dBμV]	94	94	91
Noise figure	[dB]	7,5		
ISOLATION				
Receiver / Receiver; Terrestrial / SAT	[dB]	Typ. 40, min. 30		
RETURN LOSS				
Terrestrial input passive; Receiv. output	[dB]	18, at 40MHz-1,5 / Octave		
FM input	[dB]	Typ. 14, min. 10		
INPUT POWER				
Standby, 1 Receiver + LNB + AMS 5550	[W / VA]	0,5 / 2,1 minimum input power; 13 / 26 maximum input power		
Current demand per receiver	[mA]	40		

* at filter shoulder @862MHz additionally max. 1dB** for 60dB KMA accord. EN 50083-3

COMMON DATA		AMS 506 ECOSWITCH	AMS 508 ECOSWITCH	AMS 512 ECOSWITCH
Impedance	[Ω]	75		
Connectors		F jacks		
LNB-supply voltage	[V]	12V /12V_18V_0kHz_22KHz		
Max. LNB current plus AMS 5550	[mA]	350 plus max. 220 (12V mode)		
Power LED		Green: SAT mode; yellow: SAT standby; red: overload / short circuit		
Receiver LED		Green: when receiver voltage is applied		
EMC		Accord. EN 50053-2		
Power supply	[V~/Hz]	230 / 50 ± 10%		
Ambient temperature	[°C]	-15...+55		
Dimensions (W x H x D)	[mm]	241 x 177 x 47		314 x 177 x 47

HIGH-QUALITY CASCADABLE MULTI SWITCHES 4 SAT-INPUTS + 1 TERRESTRIAL

- Passive terrestrial input, or switchable FM active for direct connection of an antenna
- Separate level controllers for every SAT-input
- LNB-supply selectable 12 V /18 V/22 kHz
- Energy saving switching-power supply, 0,5 W power consumption in stand-by mode
- LED control per subscriber and for output current monitoring (short circuit proof)
- Optional SVP 20 crowbar

TYP		AMS 558 ECOSWITCH
SAT RANGE		
Frequency range	[MHz]	950-2150
Gain	[dB]	2 ± 2,5
Output level	[dBμV]	Typ. 105 for 35dB IMA2 and IMA3 accord. EN 50083-3
SAT-input attenuator	[dB]	0-10
Passband attenuation	[dB]	4 ± 1
ISOLATION		
SAT-input / SAT-input; SAT / Terrest.	[dB]	Typ. 40, min. 36
Receiver / Receiver	[dB]	Typ. 30, min. 25
RETURN LOSS		
SAT-LNB inputs; SAT trunk-output	[dB]	Typ. 14, min. 10
Receiver outputs	[dB]	Typ. 10, min. 6
TERRESTRIAL RANGE PASSIVE		
Frequency range	[MHz]	5-862
Tap loss	[dB]	29,5 ± 1,5 (at filter shoulder @862MHz additionally max. 1dB)
Trunk passband attenuation	[dB]	4,1 ± 0,3
FM RANGE AMPLIFIER, BANDPASS FILTERED FOR DIRECT CONNECTION TO AN FM AERIAL		
Frequency range	[MHz]	87,5-108
Uncoupling amplification receiver	[dB]	4,5 ± 1,5
Uncoupling amplification trunk	[dB]	29,5 ± 1,5
FM attenuator	[dB]	0-20
Maxim. output level receiver	[dBμV]	87 (for 60dB KMA accord. EN 50083-3)
Maxim. Output level trunk	[dBμV]	112 (for 60dB KMA accord. EN 50083-3)
Noise figure	[dB]	7,5
ISOLATION		
Receiver / Receiver; Terrestrial / SAT	[dB]	Typ. 40, min. 30
RETURN LOSS		

Input terrestr. passive; output trunk	[dB]	18, at 40MHz-1,5 / Octave
Input FM / trunk output	[dB]	Typ. 14, min. 10
Receiver outputs	[dB]	18, at 40MHz-1,5 / Octave
POWER CONSUMPTION		
Standby, 1 Receiver + LNB + AMS 5550	[W / VA]	0,5 / 2,1 minimum power consumption; 13 / 26 maximum power consumption
Current demand per receiver	[mA]	40
Impedance	[Ω]	75

COMMON DATA		
Connectors		F jacks
LNB-voltage supply	[V]	12V /12V_18V_0kHz_22KHz
Max. LNB current plus AMS 5550	[mA]	350 plus max. 220 (12V mode)
Power LED		Green: SAT mode; yellow: SAT standby; red: overload / short circuit
Receiver LED		Green: when receiver voltage is applied
EMC		Accord. EN 50053-2
Voltage supply	[V~/Hz]	230 / 50 ± 10%
Ambient temperature	[°C]	-15...+55
Dimensions (W x H x D)	[mm]	241 x 249 x 47

TYP		AMS 5508 ECOSWITCH	AMS 5512 ECOSWITCH	AMS 5516 ECOSWITCH	AMS 5580 ECOSWITCH	AMS 5160 ECOSWITCH
SAT RANGE						
Frequency range	[MHz]	950–2150				
Gain	[dB]	2 ± 2,5				
Maximum output level	[dBμV]	Typ. 105 for 35dB IMA2 and IMA3 accord. EN 50083-3				
Trunk passband attenuation	[dB]	2,4 ± 1,5	2,7 ± 1,5	2,7 ± 1,5	2,4 ± 1,5	2,7 ± 1,5
ISOLATION						
SAT-input / SAT-input	[dB]	Typ. 40, min. 36				
SAT / Terrestrial	[dB]	Typ. 40, min. 36				
Receiver / Receiver	[dB]	Typ. 30, min. 25				
RETURN LOSS						
SAT LNB inputs	[dB]	Typ. 14, min. 10				
SAT trunk outputs	[dB]	Typ. 14, min. 10				
Receiver outputs	[dB]	Typ. 10, min. 6				
TERRESTRIAL RANGE PASSIVE						
Frequency range	[MHz]	5–862				
Decoupling attenuation *	[dB]	22,5± 1,5	25,5 ± 1,5	25,5 ± 1,5	22,5 ± 1,5	25,5 ± 1,5
Trunk passband attenuation	[dB]	4,8 ± 0,8				
Maximum input level	[dBμV]	Typ. 120, accord. EN 50083-2				
ISOLATION						
Receiver / Receiver	[dB]	Typ. 40, min. 30				
Terrestrial / SAT	[dB]	Typ. 40, min. 30				
RETURN LOSS						
Input terrestrial passive	[dB]	18, at 40MHz -1,5 / octave				
Output trunk	[dB]	18, at 40MHz -1,5 / octave				
Receiver outputs	[dB]	18, at 40MHz -1,5 / octave				
POWER CONSUMPTION						
Current demand per receiver	[mA]	40				40 plus Quatro LNB viaV/L
COMMON DATA						
LNB-voltage supply	[V]					Depends on multiswitch, only suitable for quadro LNB's, no SAT preamplifier
Max. LNB current plus AMS 5550 (remote feedable SAT amplifier)	[mA]	-				
DC-admission per SAT trunk	V / mA]		25 / 700		25 / 700 diode decoupled	
Receiver LED		Green: when receiver voltage is applied				
Ambient temperature	[°C]	-15...+55				
Dimensions (W x H x D)	[mm]	170 x 177 x 47	177 x 231 x 47	170 x 177 x 47		77 x 231 x 47

* at filter shoulder @862MHz additionally max. 1 dB

AMPLIFIERS FOR AMS 5XXX CASCADABLE MULTI SWITCHES

- Separate level control and equalizer for every SAT input
- DC bypass function for LNB supply selectable
- Only AMS 550: terrestrial input passive, or switchable FM active for direct connection to an antenna
- Only AMS 550: LNB supply selectable
- 12 V /18 V /22 kHz
- Only AMS 550: energy saving switching power supply, only 0,5 W power consumption in stand by mode
- Only AMS 550: LED control for output current monitoring
- Only AMS 5500: supply by AMS multiswitches (quatro switch capable)
- Only AMS 5500: stand by function



TYP		AMS 550 ECOSWITCH	AMS 5550 ECOSWITCH
FREQUENCY RANGE			
FM, bandpass filtered, for direct connection to FM aerial	[MHz]	87,5-108	
Terrestrial passive	[MHz]	5-862	
SAT-IF	[MHz]	950-2150	
GAIN			
FM	[dB]	30 ± 1,5	-
Terrestrial passive	[dB]	-2,5 ± 0,5	-
SAT - IF	[dB]	20 ± 1,5	
ATTENUATOR			
FM	[dB]	0-20	-
SAT - IF	[dB]	0-20	
SAT-IF Slope	[dB]	0-8	
MAXIMUM OUTPUT LEVEL			
FM 60 dB KMA accord. EN 50083-3	[MHz]	112	-
SAT-IF 35 dB IMA 2 / IMA 3 accord. EN 50083-3		110	
NOISE FIGURE			
FM	[dB]	7,5	-
SAT-IF	[dB]	8	
RETURN LOSS			
FM Input / Output	[dB]	Typ. 14, min 10	-
Terrestrial passive Input / Output	[dB]	18, at 40 MHz-1,5 / Octave	-
SAT-IF Input / Output	[dB]	Typ. 14, min 10	
ISOLATION			
Isolation SAT trunk/ SAT trunk	[dB]	Typ. 40, min. 36	
Selection SAT ... Terrestrial	[dB]	Typ. 40, min. 25	
Selection Terrestrial ... SAT	[dB]	Typ. 30, min. 20	-
POWER CONSUMPTION			
Min. 1 receiver on, terr. passive, DC-Bypass mode	[W / VA]	3,7 / 6,9	-
Remote powering current demand at 10 V/14 V/18 V	[mA]	-	220 / 170 / 140
COMMON DATA			
Impedance	[Ω]	75	75
Connectors		F jacks	F jacks
LNB-voltage supply	[V]	12V /12V_18V_0 kHz_22 KHz	-
Max. LNB current	[mA]	350	

DC-admission per SAT trunk	[V/ mA]	25 / 700 (DC- Bypass)	25 / 700
Power LED		Green: SAT mode; yellow: SAT standby; red: overload / short circuit	Green: SAT mode
EMC		Accord. EN 50053-2	Accord. EN 50053-2
Voltage supply	[V~/Hz]	230 / 50 ± 10%	-
Ambient temperature	[°C]	-15...+55	-15...+55
Dimensions (W x H x D)	[mm]	235 x 177 x 47	159 x 177 x 47