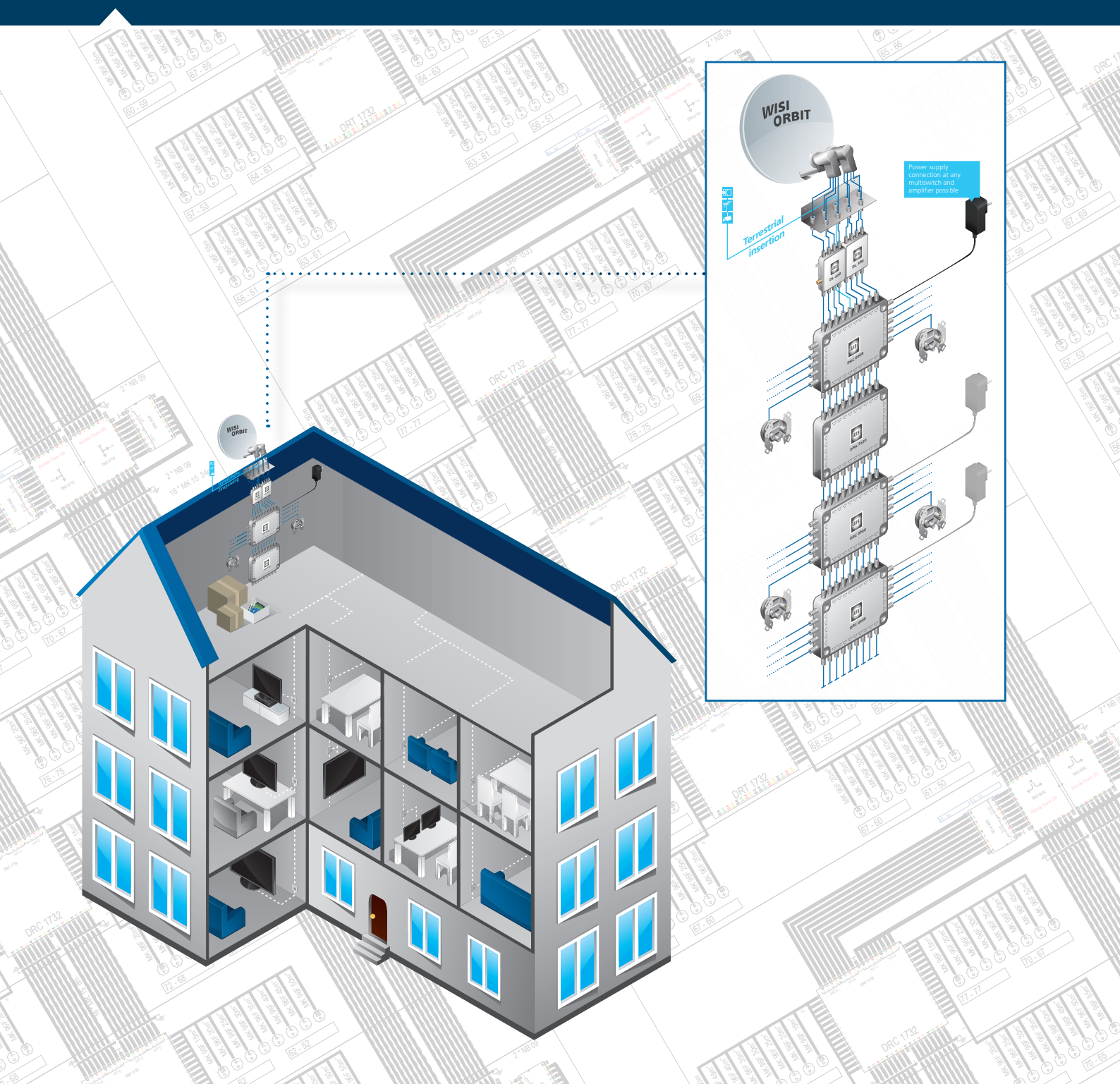
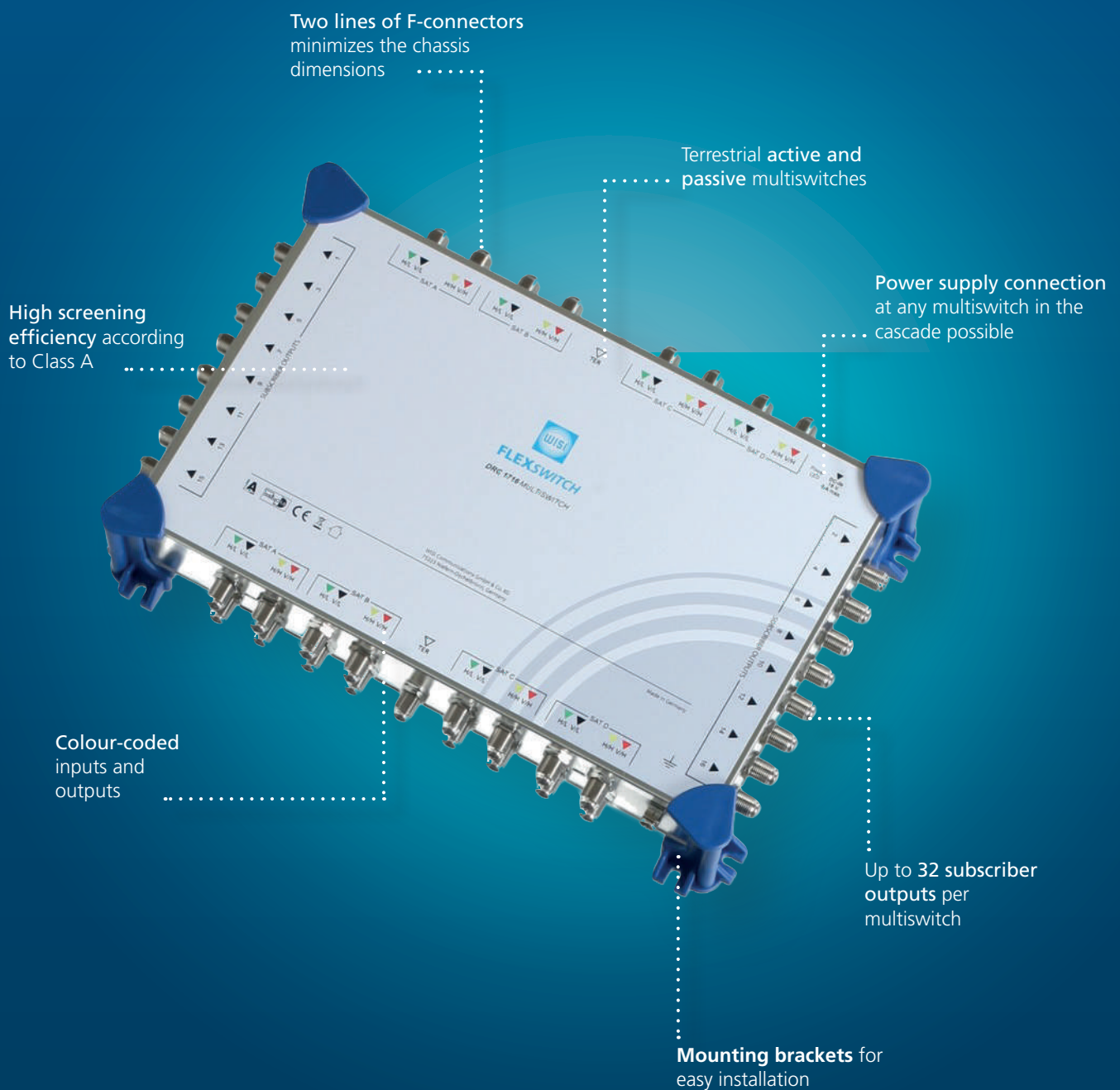


Multiswitch FLEXSWITCH series

ELPAS



WISI FLEXSWITCH: Reliable technology for flexible use



FLEXSWITCH Stand alone multiswitch

For one satellite, up to 32 subscribers

At a glance:

- Stand alone multiswitch for the distribution of four satellite polarisations and terrestrial signals
- Quad-LNB support for the easy upgrade of existing installations
- Active terrestrial path to distribute DVB-T/T2, DAB and FM without an additional amplifier
- Integrated SAT amplifier for low insertion loss
- Pre-emphasis to compensate the cable loss at high frequencies
- Colour-coded inputs



KLASSE
A
CLASS



Typ	DRS 0508	DRS 0512	DRS 0516	DRS 0524	DRS 0532
Inputs					
Quantity of TERR / SAT	1/4				
Frequency range TERR / SAT	40...862 / 950...2400 MHz				
Isolation	30 dB typ.				
Subscriber outputs					
Quantity	8	12	16	24	32
Insertion loss TERR	2 dB (± 2 dB)	2 dB (± 2 dB)	2 dB (± 2 dB)	2 dB (± 2 dB)	2 dB (± 2 dB)
Insertion loss SAT	0...-5 dB	1...-4 dB	1...-4 dB	5...0 dB	5...0 dB
Max. output level TERR	84 dB μ V				
Max. output level SAT	102 dB μ V				
Current consumption from receiver	30 mA				
Control signal	14/18 V, 0/22 kHz				
General data					
LNB supply voltage	14/18 V DC (22 kHz), max. 500 mA				
Operating voltage	90...264 V AC, 50/60 Hz				
Power consumption max.	5,5 W	5,5 W	5,5 W	7 W	7 W
Screening factor	Class A, according to EN 50083-2				
Dimensions	222 x 140 x 57 mm	310 x 110 x 57 mm	310 x 110 x 57 mm	324 x 140 x 63 mm	324 x 140 x 63 mm
Weight	0,46 kg	0,62 kg	0,64 kg	0,86 kg	0,90 kg

FLEXSWITCH receiver powered multiswitch

For one or two satellites, up to 16 subscribers

At a glance:

- Receiver powered multiswitch for the distribution of four or eight satellite polarisations and terrestrial signals
- Power supply-free usage
- Passive terrestrial path for the insertion of multimedia applications or signals from a headend system
- Integrated SAT amplifier for low insertion loss
- Pre-emphasis to compensate the cable loss at high frequencies
- Colour-coded inputs



Typ	DRR 0508	DRR 0516	DRR 0908
Inputs			
Quantity of TERR / SAT	1/4		1/8
Frequency range TERR / SAT	5...862 / 950...2400 MHz		
Isolation	30 dB typ.		
Subscriber outputs			
Quantity	8	16	8
Insertion loss TERR	18 dB (± 3 dB)	24 dB (± 3 dB)	15 dB (± 3 dB)
Insertion loss SAT	0...-5 dB	1...-4 dB	4...-2 dB
Max. output level TERR	50...110 dBµV (passive)		
Max. output level SAT	102 dBµV		
Current consumption from receiver	30 mA (without LNB)		56 mA (without LNB)
Control signal	14/18 V, 0/22 kHz		14/18 V, 0/22 kHz, DiSeqC 1.0
General data			
LNB supply voltage	Receiver powered		
Power consumption max.	< 0,5 W		< 1 W
Screening factor	Class A, according to EN 50083-2		
Dimensions	130 x 110 x 45 mm	215 x 110 x 45 mm	230 x 110 x 63 mm
Weight	0,24 kg	0,40 kg	0,48 kg

FLEXSWITCH cascadable multiswitch

For one satellite, up to 32 subscribers

At a glance:

- Cascadable multiswitch for the distribution of eight satellite polarisations and terrestrial signals
- Active terrestrial path to distribute DVB-T/T2, DAB and FM without an additional amplifier
- Integrated SAT amplifier for low insertion loss
- Pre-emphasis to compensate the cable loss at high frequencies
- Colour-coded inputs and outputs



Optional power supply

DRP 1533

- Operating voltage 230 V AC 50 / 60 Hz
- Output voltage 15 V DC
- Output current 3,3 A
- Details on page 11

Typ	DRC 0508	DRC 0512	DRC 0516	DRC 0524	DRC 0532
Inputs					
Quantity of TERR / SAT	1/4				
Frequency range TERR / SAT	40...862 / 950...2400 MHz				
Through loss TERR	2 dB (± 1 dB)	3 dB (± 2 dB)	3 dB (± 2 dB)	2 dB (± 2 dB)	2 dB (± 2 dB)
Through loss SAT	1...2 dB	2...4 dB	2...4 dB	2...6 dB	2...6 dB
Isolation	30 dB typ.				
Subscriber outputs					
Quantity	8	12	16	24	32
Insertion loss TERR	0 dB (± 3 dB)	0 dB (± 3 dB)	0 dB (± 3 dB)	2 dB (± 2 dB)	2 dB (± 2 dB)
Insertion loss SAT	3...0 dB	4...1 dB	4...1 dB	6...0 dB	6...0 dB
Max. output level TERR	84 dB μ V				
Max. output level SAT	102 dB μ V				
Current consumption from receiver	35 mA				
Control signal	14/18 V, 0/22 kHz				
General data					
Operating voltage	15 V DC				
Power consumption max.	< 0,2 W				
Screening factor	Class A, according to EN 50083-2				
Dimensions	140 x 140 x 63 mm	220 x 140 x 63 mm	220 x 140 x 63 mm	240 x 140 x 63 mm	240 x 140 x 63 mm
Weight	0,38 kg	0,54 kg	0,56 kg	0,64 kg	0,68 kg

FLEXSWITCH cascadable multiswitch

For two satellites, up to 32 subscribers

At a glance:

- Cascadable multiswitch for the distribution of eight satellite polarisations and terrestrial signals
- Passive terrestrial path for the insertion of multimedia applications or signals from a headend system
- Integrated SAT amplifier for low insertion loss
- Pre-emphasis to compensate the cable loss at high frequencies
- Colour-coded inputs and outputs



Optional power supply

DRP 1533

- Operating voltage 230 V AC 50 / 60 Hz
- Output voltage 15 V DC
- Output current 3,3 A
- Details on page 11

Typ	DRC 0908	DRC 0912	DRC 0916	DRC 0924	DRC 0932
Inputs					
Quantity of TERR / SAT	1/8				
Frequency range TERR / SAT	5...862 / 950...2400 MHz				
Through loss TERR	2...4 dB	4...6 dB	4...6 dB	4...6 dB	4...6 dB
Through loss SAT	1...3 dB	1...3 dB	2...4 dB	2...4 dB	2...4 dB
Isolation	30 dB typ.				
Subscriber outputs					
Quantity	8	12	16	24	32
Insertion loss TERR	24 dB (± 2 dB)	28 dB (± 3 dB)	28 dB (± 3 dB)	33 dB (± 3 dB)	32 dB (± 3 dB)
Insertion loss SAT	0...-2 dB	2...0 dB	2...0 dB	2...0 dB	2...0 dB
Max. output level TERR	50...110 dBμV (passive)				
Max. output level SAT	102 dBμV				
Current consumption from receiver	45 mA				
Control signal	14/18 V, 0/22 kHz, DiSEqC 1.0				
General data					
Operating voltage	15 V DC				
Power consumption max.	< 0,2 W				
Screening factor	Class A, according to EN 50083-2				
Dimensions	136 x 202 x 63 mm	190 x 203 x 63 mm	190 x 203 x 63 mm	308 x 205 x 63 mm	308 x 205 x 63 mm
Weight	0,52 kg	0,70 kg	0,72 kg	1,14 kg	1,16 kg

Installation example for two satellites:

Cascade system with adjustable SAT-IF-amplifier

At a glance:

- Signal reception and distribution of two satellite positions and terrestrial insertion
- 8...32 subscribers per multiswitch
- Easy installation by F-Quick connector (DV 49 A)
- 4-way surge protector DL 400

Offset antenna

- OA 85 G/H/I (with OF 85 0002)

Feed system/LNB

- 2x OC 04 D

Cable

- MK 96 A

Multiswitch

- DRC 0908
- DRC 0924
- DRC 0912
- DRC 0932
- DRC 0916

Amplifier

- 1x DRA 9120

Antenna sockets

- DB 53
- DB 54

Grounding/Surge protector

- 1x NB 09
- 2x DL 400

Terminating resistors

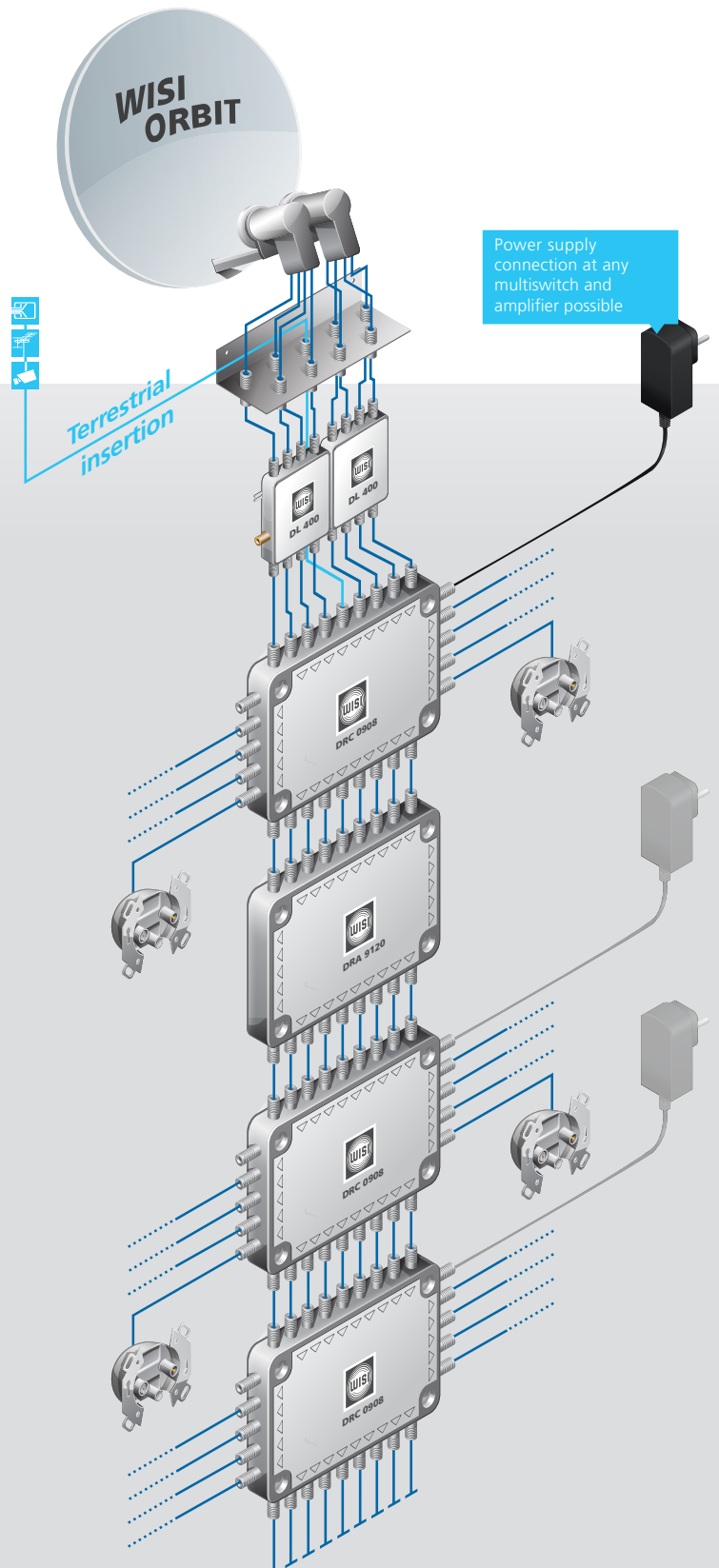
- 9x DV 25

Power supply

- 1x DRP 1533

F-Quick connector

- 9x DV 49 A



FLEXSWITCH cascadable multiswitch

For three satellites, up to 32 subscribers

At a glance:

- Cascadable multiswitch for the distribution of 12 satellite polarisations and terrestrial signals
- Passive terrestrial path for the insertion of multimedia applications or signals from a headend system
- Integrated SAT amplifier for low insertion loss
- Pre-emphasis to compensate the cable loss at high frequencies
- Colour-coded inputs and outputs



Optional power supply

DRP 1533

- Operating voltage 230 V AC 50 / 60 Hz
- Output voltage 15 V DC
- Output current 3,3 A
- Details on page 11

Typ	DRC 1308	DRC 1312	DRC 1316	DRC 1324	DRC 1332
Inputs					
Quantity of TERR / SAT	1/12				
Frequency range TERR / SAT	5...862 / 950...2400 MHz				
Through loss TERR	2...3 dB	2...5 dB	2...5 dB	3...5 dB	3...5 dB
Through loss SAT	2...0 dB	1...3 dB	1...3 dB	2...5 dB	2...5 dB
Isolation	30 dB typ.				
Subscriber outputs					
Quantity	8	12	16	24	32
Insertion loss TERR	22 dB (± 2 dB)	28 dB (± 3 dB)	28 dB (± 3 dB)	33 dB (± 3 dB)	33 dB (± 3 dB)
Insertion loss SAT	4...0 dB	3...0 dB	3...0 dB	2...0 dB	2...0 dB
Max. output level TERR	50...110 dBμV (passive)				
Max. output level SAT	102 dBμV				
Current consumption from receiver	55 mA				
Control signal	14/18 V, 0/22 kHz, DiSEqC 1.0				
General data					
Operating voltage	15 V DC				
Power consumption max.	< 0,2 W				
Screening factor	Class A, according to EN 50083-2				
Dimensions	130 x 290 x 63 mm	189 x 291 x 63 mm	189 x 291 x 63 mm	310 x 293 x 63 mm	189 x 291 x 63 mm
Weight	0,73 kg	0,91 kg	0,92 kg	1,41 kg	1,44 kg

FLEXSWITCH cascadable multiswitch

For four satellites, up to 32 subscribers

At a glance:

- Cascadable multiswitch for the distribution of 16 satellite polarisations and terrestrial signals
- Passive terrestrial path for the insertion of multimedia applications or signals from a headend system
- Integrated SAT amplifier for low insertion loss
- Pre-emphasis to compensate the cable loss at high frequencies
- Colour-coded inputs and outputs



Optional power supply

DRP 1533

- Operating voltage 230 V AC 50 / 60 Hz
- Output voltage 15 V DC
- Output current 3,3 A
- Details on page 11

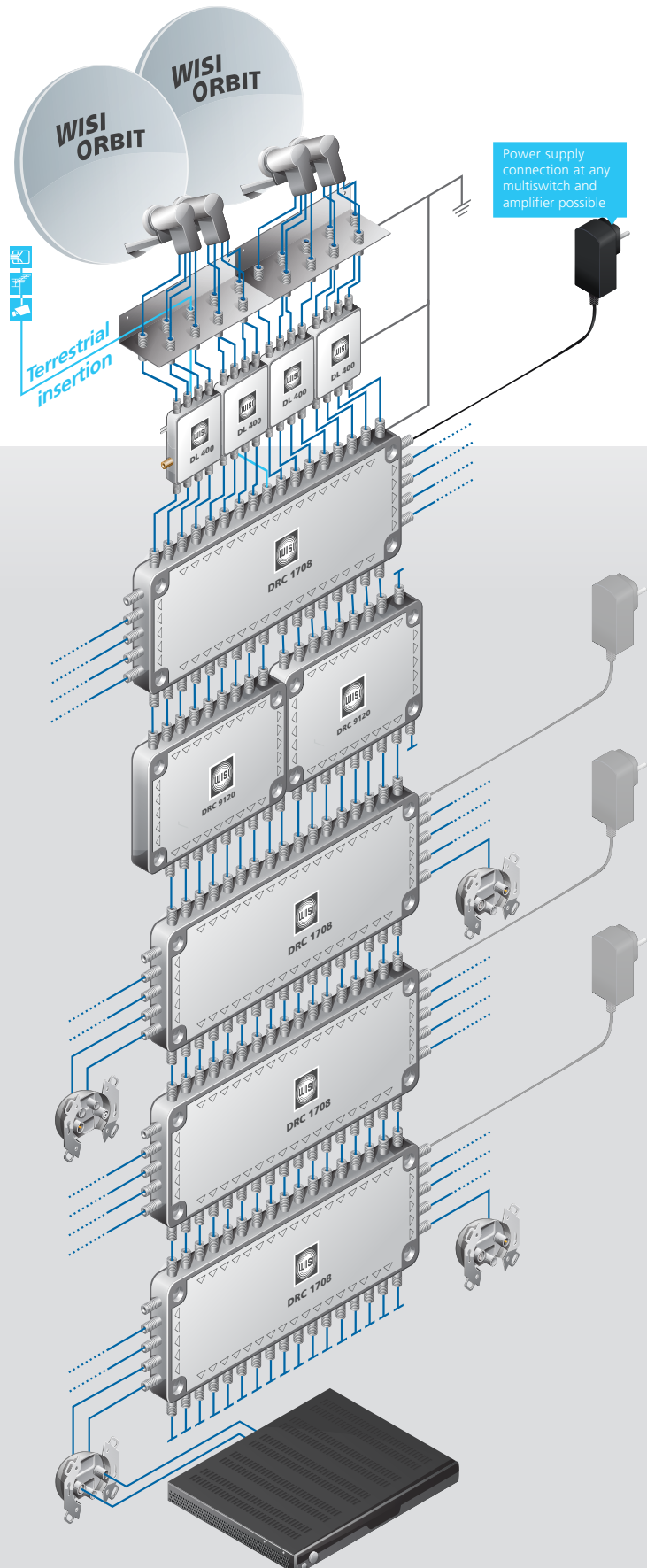
Typ	DRC 1708	DRC 1712	DRC 1716	DRC 1724	DRC 1732
Inputs					
Quantity of TERR / SAT	1/16				
Frequency range TERR / SAT	5...862 / 950...2400 MHz				
Through loss TERR	2...3 dB	2...5 dB	2...5 dB	3...5 dB	3...5 dB
Through loss SAT	2...0 dB	1...3 dB	1...3 dB	2...5 dB	2...5 dB
Isolation	30 dB typ.				
Subscriber outputs					
Quantity	8	12	16	24	32
Insertion loss TERR	24 dB (± 2 dB)	28 dB (± 3 dB)	28 dB (± 3 dB)	33 dB (± 3 dB)	33 dB (± 3 dB)
Insertion loss SAT	2...0 dB	3...0 dB	3...0 dB	2...0 dB	2...0 dB
Max. output level TERR	50...110 dBμV (passive)				
Max. output level SAT	102 dBμV				
Current consumption from receiver	55 mA				
Control signal	14/18 V, 0/22 kHz, DiSEqC 1.0				
General data					
Operating voltage	15 V DC				
Power consumption max.	< 0,2 W				
Screening factor	Class A, according to EN 50083-2				
Dimensions	130 x 290 x 63 mm	189 x 291 x 63 mm	189 x 291 x 63 mm	310 x 293 x 63 mm	189 x 291 x 63 mm
Weight	0,74 kg	1,01 kg	1,02 kg	1,47 kg	1,50 kg

Installation example for four satellites:

Cascade system with adjustable SAT-IF-amplifier

At a glance:

- Signal reception and distribution of four satellite positions and terrestrial insertion
- 8...32 subscribers per multiswitch
- Easy installation by F-Quick connector (DV 49 A)
- 4-way surge protector DL 400



Offset antenna

- 2x OA 85 G/H/I (with OF 85 0002)

Feed system/LNB

- 4x OC 04 D

Cable

- MK 96 A

Multiswitch

- DRC 1708
- DRC 1724
- DRC 1712
- DRC 1732
- DRC 1716

Amplifier

- 2x DRA 9120

Antenna sockets

- DB 53
- DB 54

Grounding/Surge protector

- 2x NB 09
- 4x DL 400

Terminating resistors

- 17x DV 25

Power supply

- 1x DRP 1533

F-Quick connector

- 34x DV 49 A

FLEXSWITCH Amplifier

For one or two satellites

At a glance:

- Line amplifier for four or eight SAT polarisations and terrestrial signals
- Adjustable gain from 5...20 dB at each input
- Remote-powered via the SAT-IF trunk lines
- Switchable DC-Bypass



Typ	DRA 5120	DRA 9120
Inputs		
Quantity of TERR / SAT	1/4	1/8
Frequency range TERR / SAT	10...862 / 950...2400 MHz	
Gain TERR / SAT	20 dB	
Equalization SAT	4 dB	
Attenuation TERR / SAT	0...15 dB	
Outputs		
Quantity of TERR / SAT	1/4	1/8
Max. output level TERR / SAT	112 / 105 dBμV	112 / 105 dBμV
General data		
Operating voltage	15 V DC	
Current consumption	< 400 mA	< 600 mA
Dimensions	140 x 71 x 45 mm	220 x 71 x 45 mm
Weight	0,28 kg	0,42 kg

FLEXSWITCH splitter

For one and two satellites

At a glance:

- Passive 2-way splitter for one or two satellites and terrestrial signals
- Switchable DC bypass for LNB powering
- High screening efficiency according to Class A
- Compact dimensions with vertical and horizontal Distribution outputs

Typ	DRX 5002	DRX 9002
Inputs		
Quantity of TERR / SAT	1/4	1/8
Frequency range TERR / SAT	5...862 / 950...2200 MHz	
Distribution outputs		
Quantity of TERR / SAT	2/8	2/16
Distribution loss TERR / SAT	4,5 / 6 dB	4,5 / 6 dB
General data		
Dimensions	0,28 kg	0,42 kg
Weight	140 x 71 x 54 mm	220 x 71 x 45 mm

At a glance:

- Power supply for DRC multiswitches and DRA amplifiers
- Including mounting bracket



Typ	DRP 1533
Operating voltage	90...264 V AC
Output voltage	15 V DC (± 0,4 V)
Max. output current	3,3 A
Dimensions	150 x 80 x 45 mm
Weight	0,8 kg