



Modular reception system

Multichannel digital transmodulators

Converting of 16 DVB-S/S2 modulated input signals into 8 COFDM/QAM modulated DVB-T/ISDB-T/DVB-C/J.83B channels.

- software switchable standards:
tdx4168: DVB-T/ISDB-T
tdq4168: DVB-C/J.83B
- supporting EN50607
- TS processing:
any service to any output
PCR restamping
PSI/SI regeneration
NIT generation
PMT version monitoring
- BISS descrambling
- Web control and SNMP monitoring, E-mail notification
- loop through RF distributing at input and output
- DIN rail or wall mounting
- robust die-cast housing
- connectors:
RF input/output - type F
Ethernet control interface - RJ-45
screw terminal block for DC entry
power distribution bus

tdx4168
16 DVB-S/S2 transmodulators to 8 DVB-T/ISDB-T channels

tdq4168
16 DVB-S/S2 transmodulators to 8 DVB-C/J.83B channels

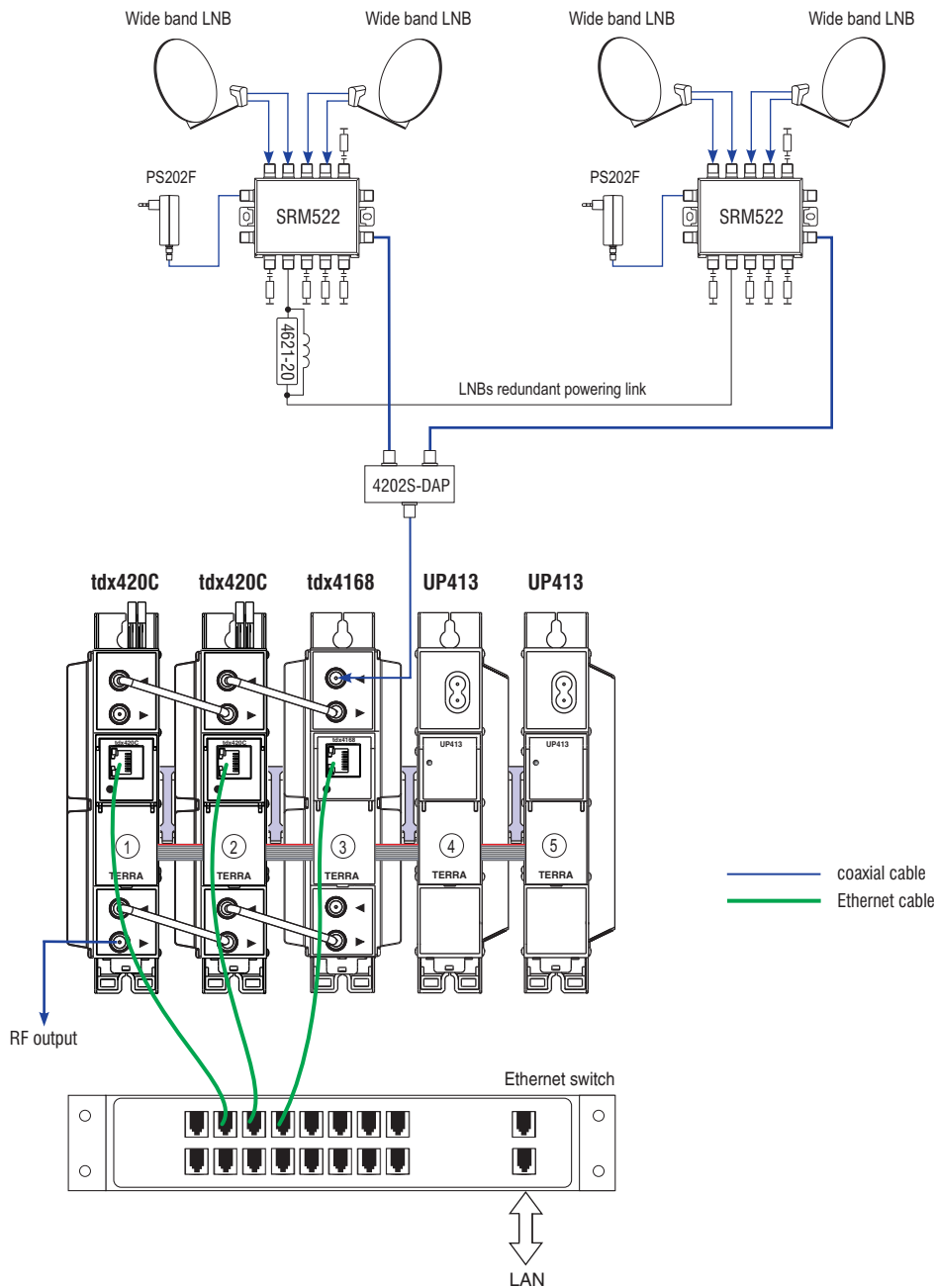


Technical specifications		tdx4168	tdq4168
TYPE		tdx4168	tdq4168
Ordering number		03876	03877
Sections input/output		16/8	
RF input	frequency range	950-2150 MHz	
	LNB powering/control	0/13/18 V & 22 kHz, 1000 mA total, DiSEqC 1.0, EN50494, EN50607	
	level/impedance	55-95 dBμV / 75 Ω	
	modulation	QPSK, 8PSK (DVB S/S2)	
	symbol rate	2 ÷ 45 Ms/s	
	return loss	≥ 10 dB	
	RF input count	2	
	loop through frequency range/loss	950-2150 MHz / ≤ 1.5 dB	
RF output	standard	DVB-T / ISDB-T	DVB-C / J.83B
	modulation	QPSK, QAM16, QAM64	QAM16, QAM32, QAM64, QAM128, QAM256
	frequency range	170-230 MHz / 470-862 MHz	96-862 MHz
	channel allocation, adjacent	4 + 4	
	level/impedance	90 ± 2 dBμV/75 Ω	
	TS bit rate	< 31 Mbit/s	< 53 Mbit/s
	MER	≥ 35 dB	≥ 40 dB
	channel bandwidth	7 MHz / 8 MHz	4...8.3 MHz
	guard interval	1/4, 1/8, 1/16, 1/32	-
	code rate	1/2, 2/3, 3/4, 5/6, 7/8	-
	symbol rate	-	3.5 ÷ 7.2 Ms/s
	return loss	≥ 10 dB	
	roll off	-	15%
	transmission mode	2K	-
	total output level adjustment	0 ÷ -15.0 dB by 1 dB step	
loop through frequency range/loss	45-862 MHz / ≤ 2.5 dB		
Management port		standard IEE802.3 10/100 Base T	
Current consumption*		12 V 1.2 A	
Operating temperature range		0° ÷ +45° C	
Dimensions/Weight (packed)		63x198x112 mm/1.12 kg	

pr. software control * without external DC feeding

Modular reception system Application diagram

Application example of SAT TV content processing from 4 satellite orbit positions:
 # 1, 2 - 4 SAT transponders to DVB-T (scrambled)
 # 3 - 16 SAT transponders to DVB-T (FTA)
 # 4 & 5 - redundant powering



- SRM522 - cascadable single cable multiswitch, see www.terraelectronics.com
- PS202F - power supply, see www.terraelectronics.com
- tdx420C - twin transmodulator with CAMs
- tdx4168 - multichannel transmodulator
- UP413 - power supply
- 4202S-DAP - 2 way splitter, see www.terraelectronics.com
- 4621-20 - DC pass attenuator, see www.terraelectronics.com