



Modular reception system

Twin digital transmodulators

Converting of 2 DVB-S/S2/T/T2/C modulated input signals into 2 QAM modulated DVB-C/J.83B channels.

- software switchable standards DVB-C/J.83B
- common interface
- TS processing:
 - service multiplexing - any input to any output
 - PCR restamping
 - PSI/SI regeneration
 - NIT generation
 - PMT version monitoring
- Web control and SNMP monitoring
- 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
 - 2xCI ports - PCMCIA (tdq420C, ttq420C)
 - screw terminal block for DC entry
 - power distribution bus

- tdq420C***
DVB-S/S2 - DVB-C/J.83B transmodulator with two CAMs
- ttq420C**
DVB-T/T2/C - DVB-C/J.83B transmodulator with two CAMs
- tdq420**
DVB-S/S2 - DVB-C/J.83B transmodulator
- ttq420**
DVB-T/T2/C - DVB-C/J.83B transmodulator



Technical specifications

T Y P E		tdq420C* / tdq420		ttq420C / ttq420		
Ordering number		03853 / 03853F		03854 / 03854F		
Number of channels				2		
RF input	frequency range	950-2150 MHz		47-862 MHz		
	LNB powering/control	0/13/18 V & 22 kHz, 1 A**** max. DiSEqC 1.0, EN50607, EN50494		12 V 100 mA		
	level/impedance	45-85 dBμV / 75 Ω		40-80 dBμV / 75 Ω		
	loop through gain	-1 ± 1 dB		0 ± 1 dB		
	standard	DVB-S	DVB-S2**	DVB-T	DVB-T2	DVB-C
	modulation	QPSK	QPSK, 8PSK APSK 8/16/32	QPSK, QAM16, QAM64	QPSK, QAM16, QAM64, QAM256	QAM16, QAM32, QAM64, QAM128, QAM256
	bandwidth	-	-	7 MHz/8 MHz	7 MHz/8 MHz	-
	symbol rate	2 ÷ 45 Ms/s	2 ÷ 45 Ms/s	-	-	1 ÷ 7.2 Ms/s
	code rate	1/2, 2/3, 3/4, 5/6, 7/8	QPSK 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 8PSK 3/5, 2/3, 3/4, 5/6, 8/9, 9/10	1/2, 2/3, 3/4, 5/6, 7/8	1/2, 3/5, 2/3, 3/4 4/5, 5/6	-
	roll off	35 %	20 %, 25 %, 35 %	-	-	15 %
RF output	standard	DVB-C / J.83B				
	modulation	QAM16/QAM32/QAM64/QAM128/QAM256 (DVB-C), QAM64/QAM256 (J.83B)				
	frequency range	100 - 858 MHz, by step 100 kHz				
	channel allocation	adjacent				
	level/impedance	90 ± 2 dBμV/75 Ω				
	return loss	≥ 14 dB at 47 MHz; -1.5 dB/oct., but not less 10 dB				
	spurious level	< -60 dB				
	MER	≥ 40 dB				
	channel bandwidth / symbol rate	4...8.3 MHz / 3.5 ÷ 7.2 MS/s				
	roll off	15 %				
signal processing	EN 300 429, J.83 A (Annex A)					
total output level adjustment	0 ÷ -15.0 dB by 1 dB step					
loop through frequency range/loss	47-2150 MHz/ ≤ 2.5 dB					
Transport stream parameters	max. bit rate	output 53 Mbps				
	max. PID filter count	unlimited				
Management port		standard IEE802.3 10/100 Base T				
Current consumption***		12 V 550 mA		12 V 650 mA		
Operating temperature range		0° ÷ +50° C				
Dimensions/Weight (packed)		48.5x198x112 mm/0.9 kg				

pr. software control

* T2-MI deencapsulation is supported only in M.1 version; M.1 version is supplied by special request

** supports physical layer scrambling (PLS) and multiple input streams (MIS)

*** without external DC feeding and CAM, with two CAM's ≈0.85 A (for tdq420C), ≈0.95 A (for ttq420C)

**** only in v.1 and v.2 versions