

912 TV-SAT AND MODULATOR EQUIPMENT

FRANSAT PRO SYSTEM 6XHD+FR3 2XCAM 1XCARD



Code : **9120235**

Model : **TT-910**

Description

Transmodulator of encrypted satellite digital television services to terrestrial digital television. Each module selects the services of a DVB-S/S2 satellite transponder and includes them in a DVB-T channel. Equipped with a Common Interface slot for insertion of the CAM and the subscriber's card. Programmable using PC software and a wireless programmer.

Applications

Collective terrestrial digital television installations where the aim is to distribute encrypted satellite television services while avoiding the installation of satellite receivers. Compatible with all collective TV installations since the channels can be distributed throughout the terrestrial band.

Characteristics

Automatic error-detection system which greatly reduces maintenance work on the installation. Generated output channel of outstanding quality. Does not include the CAM or the decoder card. Zamak chassis with metal side panels. F-type connectors. The equipment can be assembled quickly and easily.

CODE	9120147		
MODEL	IT2211		
TV system	DVB-S / DVB-S2 → DVB-T / DVB-H (in standard in standard) → in standard		
DVB-S/S2 receiver			
Frequency range	MHz	950 - 2150	
Frequency step	KHz	1	
UHF power supply	V _{cc}	+12	
UHF power supply	mA	350 max	
Symbol rate	Mbaud	1...45	
Dispensing through loss	(dB)TX	1.0 ±0.2	
DVB-S2 receiver			
Input level	(dB)V	45...95	
Input level	(dB)	-40...-13	
F.E.C. QPSK		Auto: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 DVB EN 302021	
F.E.C. BPSK		Auto: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 DVB EN 302021	
Roll-Off	dB	0.35/0.25/0.20	
DVB-T receiver			
Input level	(dB)V	45...95	
Input level	(dB)	-40...-13	
F.E.C. QPSK		Auto: 1/2, 2/3, 3/4, 5/6, 7/8 DVB EN 302021	
Conditional access			
Standard	DVB-CI EN 50221		
Compatibility	MHA	Vocorec, Medagrand, Videogrand, Seco, Interscop, Negronius, Idetec, Cryptowork, Conax	
CODE	3120147		
MODEL	IT2211		
CODEM modulator			
TV system	DVB-T / DVB-H (in standard in standard) → in standard		
Frequency range	MHz	-1/6...1/8, 5/6...178...1/6	
Mode		2K, 8K, 4K, 8K plus DVB EN 300 102	
Modulation		QPSK, 16QAM, 64QAM DVB EN 300 102	
F.E.C.		1/2, 2/3, 3/4, 5/6, 7/8 DVB EN 300 102	
Guard interval		1/4, 1/8, 1/16, 1/32 DVB EN 300 102	
MER	dB	39...43	
RF output			
Transmitting range	MHz	47/862	
Frequency step	MHz	0.25	
Output level	(dB)	80...83	
Output modulation		2K	
Bandwidth	MHz	8...7.5 (5.5) kHz	
Through loss in the antenna		59...61	
General features			
Power supply	V _{cc}	+3...3	+5...2
Power supply	mA	1200	300...600
Operating T close to equipment		-30...+45	
Room T with/without fan		-30...+55/45	
Protection class		IP20	
Units per packing		P50	
Packing weight	kg	1.4	
Package dimensions		279 x 171 x 58	

CODE		9120201	
MODEL		IT411	
TV system		DVB-S / DVB-S2 → DVB-T / DVB-H in standard in standard	
Connection		F female	
Number of inputs		1 with displacement or 2 independent	
DVB-S/S2 receiver			
Frequency range	MHz	950 - 2150	
Frequency step	KHz	DISEC 2.0	
UHF power supply	V _{cc}	+12 / +18 (D/220Hz)	
UHF power supply	mA	350 max	
Symbol rate	Mbaud	1...45	
Dispensing through loss	(dB)TX	1.0 ±0.2	
DVB-S2 receiver			
Input level	(dB)V	45...95	
Input level	(dB)	-40...-13	
F.E.C. QPSK		Auto: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 DVB EN 302021	
F.E.C. BPSK		Auto: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 DVB EN 302021	
Roll-Off	dB	0.35/0.25/0.20	
DVB-T receiver			
Input level	(dB)V	40...95	
Input level	(dB)	-40...-13	
F.E.C. QPSK		Auto: 1/2, 2/3, 3/4, 5/6, 7/8 DVB EN 302021	
Conditional access			
Standard	DVB-CI EN 50221		
Compatibility	Vocorec, Medagrand, Videogrand, Seco, Interscop, Negronius, Idetec, Cryptowork, Conax		
CODE		9120201	
MODEL		IT411	
CONAX modular			
TV system		DVB-T / DVB-H DVB EN 302021	
Output port	MFG	-1.6/-1.6, -1.6/-1.6, +1.6/+1.6	
Mode		25, 50, 400 channels DVB EN 302021	
Multistandard		QPSK, 16QAM, 64QAM DVB EN 302021	
F.E.C.		1/2, 2/3, 3/4, 5/6, 7/8 DVB EN 302021	
Guard interval	dB	1/4, 1/8, 1/16, 1/32 in 200 kHz	
RF output		30 dBm	
Frequency range	MHz	47-862	
Frequency step	KHz	12.5	
Output level	(dBm)	80 ±0.2	
Channel output	dB	6, 7, 8, 5, 35 dB	
Bandwidth	MHz	6, 7, 8, 5, 35 MHz	
Through loss in the window	dB	0.9 ±0.1	
Power supply			
Power supply	V _{cc}	+3.3	+5.2
Power supply	A	1600	200
Opening 1 chip to equipment		100	40
Reset 1 with / without bus		100	40
Protection delay		100	40
Static power		100	40
Power supply	V _{cc}	+3.3	+5.2
Power supply	A	1600	200
Opening 1 chip to equipment		100	40
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Static power		100	40
Power supply	V _{cc}	+3.3	+5.2
Power supply	A	1600	200
Opening 1 chip to equipment		100	40
Reset 1 with / without bus		100	40
Protection delay		100	40
Static power		100	40
Power supply	V _{cc}	+3.3	+5.2
Power supply			

CODE	9120210	
MODEL	IT3112	
TV system	DVB-S / DVB-S2 → DVB-T / DVB-H DVB EN 302021 → in standard	
Connection	F Female	
Number of inputs	1	
Number of output channels	1 or 2 (dependent)	
DVB-S/S2 receiver		
Frequency range	MHz	950 - 2150
Frequency step	KHz	1
UHF power supply	V _{cc}	DISEC 2.0
UHF power supply	mA	+13 / +18 (D/220Hz)
UHF power supply	mA	350 max
Symbol rate	Mbaud	1...45
Dispensing through loss	(dB)TX	1.0 ±0.2
DVB-S2 receiver		
Input level	(dB)V	45...95
Input level	(dB)	-40...-13
F.E.C. QPSK		Auto: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 DVB EN 302021
F.E.C. BPSK		Auto: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 DVB EN 302021
Roll-Off	dB	0.35/0.25/0.20
DVB-T receiver		
Input level	(dB)V	40...95
Input level	(dB)	-40...-13
F.E.C. QPSK		Auto: 1/2, 2/3, 3/4, 5/6, 7/8 DVB EN 302021
Roll-Off	dB	0.35
Conditional access		
Standard	DVB-CI EN 50221	
Compatibility	Vocorec, Medagrand, Videogrand, Seco, Interscop, Negronius, Idetec, Cryptowork, Conax	

CODE	9120210	
MODEL	IT3112	
TV system	DVB-T / DVB-H DVB EN 302021	
Connection	F Female	
Number of inputs	1 or 2 independent	
Number of output channels	1 or 2 (dependent)	
DVB-S/S2 receiver		
Frequency range	MHz	950 - 2150
Frequency step	KHz	1
UHF power supply	V _{cc}	DISEC 2.0
UHF power supply	mA	+13 / +18 (D/220Hz)
UHF power supply	mA	350 max
Symbol rate	Mbaud	1...45
Dispensing through loss	(dB)TX	1.0 ±0.2
DVB-S2 receiver		
Input level	(dB)V	45...95
Input level	(dB)	-40...-13
F.E.C. QPSK		Auto: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 DVB EN 302021
F.E.C. BPSK		Auto: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 DVB EN 302021
Roll-Off	dB	0.35/0.25/0.20
DVB-T receiver		
Input level	(dB)V	40...95
Input level	(dB)	-40...-13
F.E.C. QPSK		Auto: 1/2, 2/3, 3/4, 5/6, 7/8 DVB EN 302021
Roll-Off	dB	0.35
Conditional access		
Standard	DVB-CI EN 50221	
Compatibility	Vocorec, Medagrand, Videogrand, Seco, Interscop, Negronius, Idetec, Cryptowork, Conax	

CODE		9120093
MODEL		PA-720
TV System		AM-TV / DVB-T / DVB-C
Number of inputs		1
Frequency range	MHz	40 - 894
Gain	dB±TOL	44 ±1,0
Gain adjustment	dB	15
Output level	dBµV	119 DIN 45004B 116 (IMD3 - 60 dB) 110 (IMD2 - 60 dB) 103 (CTB - 60 dB) 103 (CSO - 60 dB) 104 (XMOD - 60 dB)
Output test point	dB±TOL	-30 ±1,0
Extension input loss	dB±TOL	0 ±2,0
Noise figure	dB	35 ±0,5
Return loss	dB	>14 - 1.5 / eighth >10
Chroma-luminance delay	ns	<10
Connectors		F female
Power supply	V $\overline{\text{---}}$	+24
	mA	320
Operating temperature	°C	-10..+45
Room temperature with/ without fan	°C	-10..+55/+45
Protection index		IP 20C
Units per packaging		1
Packing weight	Kg	1.16
Packing dimensions	mm	265 x 165 x 40

CODE		9120046				9120168			
MODEL		FA-310				FA-312			
Output voltage	V $\overline{\text{---}}$	+3.3	+5.2	+12.0	+24	+3.3	+5.2	+12.0	+24
	mA	5500	2500	1500	500	10000	5000	1500	500
Peak to peak ripple voltage	mV	>50				100			
Mains voltage	V \sim	230 \pm 20% 50/60 Hz		240 $\begin{smallmatrix} +15\% \text{ 50/60 Hz} \\ -20\% \text{ 50/60 Hz} \end{smallmatrix}$		90..264 $\begin{smallmatrix} 50/60 \text{ Hz} \end{smallmatrix}$			
	W	72				85			
Operating temp. close to equipment	°C	-10..+65							
Room tmperature with/without fan	°C	-10..+55/+45							
Protection index		IP 20C							
Units per packaging		1							
Packing weight	Kg	1.43				1.65			