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		TT-211		
TV system		DVB-S / DVB-S2 → DVB-T/DVB-H EN 300421 EN 302307 EN 300744		
DVB-S/S2 receiver				
Frequency range	MHz	950 - 2.150		
Frequency step	KHz	1		
LNB power supply	V=:	+12		
	mA	350 max		
Symbol rate	Mbaud	1..45		
Diplexing through loss	dBsTOL	1.0 ±0.2		
DVB-S2 receiver				
Input level	dBµV	45..95		
	dBm	-63..-13		
F.E.C. QPSK		Auto, 1/2, 3/5, 2/3, 3/4, 4/5 5/6, 8/9, 9/10 DVB EN 302307		
F.E.C. 8PSK		Auto, 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 DVB EN 302307		
Roll-Off	dB	0,35/0,25/0,20		
DVB-S receiver				
Input level	dBµV	40..95		
	dBm	-68..-13		
F.E.C. QPSK		Auto, 1/2, 2/3, 3/4, 5/6, 7/8 DVB EN 300421		
Conditional access				
Standard		DVB-CI EN 50221 Common Interface		
Compatibility	MHz	Viaccess, Mediaguard, Videoguard, Seca, Betacryp, Nagravision, Irdeto, Cryptoworks, Conax		

CODE		9120147		
MODEL		TT-211		
COFDM modulator				
TV system		DVB-T / DVB-H DVB EN 300744		
Output offset	MHz	-1/6, -1/8, 0, +1/8, +1/6 DVB-T		
Mode		2K, 8K, 4K DVB-H DVB EN 300744		
Modulation		QPSK, 16QAM, 64QAM DVB EN 300744		
F.E.C.		1/2, 2/3, 3/4, 5/6, 7/8 DVB EN 300744		
Guard interval		1/4, 1/8, 1/16, 1/32 DVB EN 300744		
MER	dB	39 ±2.0		
RF output				
Frequency range	MHz	47-862		
Frequency step	MHz	0,25		
Output level	dBµV	80 ±2.0		
Ouput level adjust	dB	20		
Bandwidth	MHz	8, 7, 6, 5 DVB-H		
Through loss in the mixture	dB	0,9 ±0.1		
General features				
Power supply	V=:	+3,3	+5,2	+12
	mA	1200	390+CAM	70+LNB
Operating T close to equipment		-10..+65		
Room T with/without fan		-10..+55/+45		
Protection index		IP30		
Units per packing		1		
Packing weight	Kg	1,4		
Packing dimensions	mm	270 x 170 x 38		

CODE		9120201		
MODEL		TT-411		
TV system		DVB-S / DVB-S2 → DVB-T / DVB-H EN 300421 EN 302307 EN 300744		
Connection		F female		
Number of inputs		1 with duplexing or 2 independents		
DVB-S/S2 receiver				
Frequency range	MHz	950 - 2.150		
Frequency step	KHz	1		
LNB power supply	V=:	DiSEqC 2.0 +13 / +18 (0/22KHz)		
	mA	350 max		
Symbol rate	Mbaud	1..45		
Diplexing through loss	dBsTOL	1.0 ±0.2		
DVB-S2 receiver				
Input level	dBµV	45..95		
	dBm	-63..-13		
F.E.C. QPSK		Auto, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 DVB EN 302307		
F.E.C. 8PSK		Auto, 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 DVB EN 302307		
Roll-Off	dB	0,35/0,25/0,20		
DVB-S receiver				
Input level	dBµV	40..95		
	dBm	-68..-13		
F.E.C. QPSK		Auto, 1/2, 2/3, 3/4, 5/6, 7/8 DVB EN 300421		
Conditional access				
Standard		DVB-CI EN 50221 Common Interface		
Compatibility		Viaccess, Mediaguard, Videoguard, Seca, Betacryp, Nagravision, Irdeto, Cryptoworks, Conax		

CODE		9120201		
MODEL		TT-411		
COFDM modulator				
TV system		DVB-T / DVB-H DVB EN 300744		
Output offset	MHz	-1/6, -1/8, 0, +1/8, +1/6 DVB-T		
Mode		2K, 8K, 4K DVB-H DVB EN 300744		
Modulation		QPSK, 16QAM, 64QAM DVB EN 300744		
F.E.C.		1/2, 2/3, 3/4, 5/6, 7/8 DVB EN 300744		
Guard interval		1/4, 1/8, 1/16, 1/32 DVB EN 300744		
MER	dB	39 ±2.0		
RF output				
Frequency range	MHz	47-862		
Frequency step	MHz	0,25		
Output level	dBµV	80 ±2.0		
Ouput level adjust	dB	20		
Bandwidth	MHz	8, 7, 6, 5 DVB-H		
Through loss in the mixture	dB	0,9 ±0.1		
General features				
Power supply	V=:	+3,3	+5,2	+12
	mA	1600	320+CAM	40+LNB
Operating T close to equipment		-10..+65		
Room T with/without fan		-10..+55/+45		
Protection index		IP30		
Units per packing		1		
Packing weight	Kg	1,4		
Packing dimensions	mm	270 x 170 x 38		

CODE		9120213		
MODEL		TT-312		
TV system		DVB-S / DVB-S2 → DVB-T/DVB-H EN 300421 EN 302307 EN 300744		
Connection		F Female		
Number of inputs		1		
Number of output channels		1 à 2 (adjacent)		
DVB-S/S2 receiver				
Frequency range	MHz	950 – 2150		
Frequency step	KHz	1		
LNB power supply	V⎓	DiSEqC 2.0 +13/+18 (0/22KHz)		
	mA	350 max.		
Symbol rate	Mbaud	1..45		
Diplexing through loss		1,0±0,2		
DVB-S2 receiver				
Input level	dBµV	45..95		
	dBm	-63..-13		
F.E.C. QPSK		Auto, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 DVB- EN 302307		
F.E.C. 8PSK		Auto, 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 DVB- EN 302307		
Roll-Off	dB	0,35/0,25/0,20		
DVB-S receiver				
Input level	dBµV	40..95		
	dBm	-68..-13		
F.E.C. QPSK		Auto, 1/2, 2/3, 3/4, 5/6, 7/8 DVB- EN 302307		
Roll-Off	dB	0,35		
Conditional access				
Standard		DVB-CI EN 50221 Common Interface		
Compatibility		Viaccess, Mediaguard, Videoguard, Seca, Betacryp, Nagravision, Irdeto, Cryptoworks, Conax		
COFDM modulator				
TV system		DVB-T/DVB-H EN 300744		
Output offset	MHz	-1/6, -1/8, 0, +1/8, +1/6 DVB-T		
Mode		2K, 8K, 4K DVB-H DVB- EN 300744		
Modulation		QPSK, 16QAM, 64QAM DVB- EN 300744		
F.E.C.		1/2, 2/3, 3/4, 5/6, 7/8 DVB- EN 300744		
Guard interval		1/2, 1/8, 1/16, 1/32 DVB- EN 300744		
MER	dB	39±2.0		
RF output				
Frequency range	MHz	47-862		
Frequency step	MHz	0,25		
Output level	dBµV	80±2.0		
Output level adjust	dB	20		
Bandwidth par channel	MHz	8, 7, 6, 5 DVB-H		
Through loss in the mixture	dB	0,9±1		
General features				
	V	+3.3	+5.2	+12
	mA	1300	550+CAM	55+LNB
Operating T close to equipment	°C	-10..+65		
Room T with/without fan	°C	-10..+55/+45		
Protection index		IP 30		
Units per packing		1		
Packing weight	Kg	1,4		
Packing dimensions	mm	265 x 165 x 40		

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⎓	+24
	mA	320
Operating temperature	ºC	-10..+45
Room temperature with/ without fan	ºC	-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⎓	+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~	230 ±20% 50/60 Hz		240 +15% 50/60 Hz -20% 50/60 Hz		90..264 50/60 Hz			
	W	72				85			
Operating temp. close to equipment	ºC	-10..+65							
Room tmperature with/ without fan	ºC	-10..+55/+45							
Protection index		IP 20C							
Units per packaging		1							
Packing weight	Kg	1.43				1.65			