

## 912 TV-SAT AND MODULATOR EQUIPMENT

## FRANSAT PRO SYSTEM 6XHD 2XCAM 1XCARDS



Code: 9120236

Model: TT-911

## 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 scard. 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.



MODEL		TF211				
TV system		DV8-5 / DV8-52 → DV8-T/DV8-H 81-300421 81-302307 81-300744				
DV8-5/S2 receiver						
Frequency range	MHz	950 - 2.150				
Frequency step	KI-liz	1				
UNB power supply	V=	+12				
rue bower sobbié	nA.	350 máx				
Symbol rate	Mood	1,45				
Diplosing through loss	d8±TOL	1.0 (0.2				
DV8-52 receiver						
Incut level	dByV	45.95				
Input sever	dBrs	6313				
F.E.C. GPSK		Auto, 1/2, 3/5, 2/3, 3/4, 4/5 5/6, 8/9, 9/10 0/8 04102387				
E.E.C. 8PSK		Auto, 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 098 bis32307				
Roll-Off	dB	0,35/0,25/0,20				
DVB-S receiver						
Input level	dbyV	40.95				
Input sever	din	6013				
F.E.C. GPSK		Auto, 1/2, 2/3, 3/4, 5/6, 7/8 0/8 0110021				
Conditional access						
Stondard		DVB-CI: EN 50221 Commo Intefaco				
Compatibility	MHz	Viacces, Mediaguard, Videoguard, Seca, Betucryp, Nagravision, Irdeto, Cryptoworks, Coeax				

Compatibility	MHz	Irdeto, Cryptoworks, Coeax							
MODEL		TT-211							
COFDM modulator									
TV system		DVBT / DVBH 0%: 0+100744							
Output offset	MHz	-1/6, -1/8, 0, +1/8, +1/6							
Mode			2K, BK, 4K preseq 0'40 th 100744						
Modulation		QPSK, 16QAM, 64QAM (VIII. In 196744							
FEC.			1/2, 2/3, 3/4, 5/6, 7/8 0/8 lbs 100744						
Guard interval			1/4, 1/8, 1/16, 1/32 ove to 100744						
MER	dB		39 ,2,0						
RF output									
Frequency range	MHz	47-862							
Frequency step	MHz		0,25						
Output level	dByV	80 +2,0							
Ouput level adjust	dB		20						
Bondwidth	MHz	8, 7, 6, 5 over							
Through loss in the mixture	dB	0,9 ω,1							
General features									
Power aupply	Ver	+3,3	+5,2	+12					
rower suppry	mA .	1200	390+CAM	70+IN8					
Operating T clase to equipme	nt I		-10+65						
Room T with/without fan		-10.+55/+45							
Protection Index		P90							
Units per pocking		1							
Packing weight	Ka	1,4							
Packing chremoions	re	270 x 170 x 38							

CODE		9120201						
MODEL		П-411						
	DV85 / DV852							
TV system		DV8-5 / DV8-52						
Connection		F female						
Number of inputs		1 with duplexing or 2 independents						
DVB-S/S2 receiver								
Frequency ronge	MHz	950 - 2.150						
Frequency step	KHz	I .						
INB power supply	V:::	DISEgC 2.0 +13 / +18 [0/22KHz]						
	mA.	350 wax						
	Mboud	1.45						
	dB±TOL	1.0 402						
DVB-52 receiver								
Input level	dB <sub>V</sub> /Y	4595						
Inpat sees	dite	-6313						
F.E.C. GPSK		Auto, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 DWI IN 302307						
F.E.C. 8PSK		Auto, 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 (VII) BN 303307						
Roll-Off	dà	0,35/0,25/0,20						
DVB-S receiver								
Input level	dByV	40.95						
Input level	dBn	-6813						
F.E.C. GFSK		Auto, 1/2, 2/3, 3/4, 5/6, 7/8 DNs IN 300221						
Conditional access								
Standard		DVB-C1: EN 50221						
Compatibility	_	Commit Idealain  Vioccess, Medioguard, Videoguard, Seco, Betocryp, Nagrovision, Irdato, Cryptoworks, Conor						
		9120201						
CODE								
MODEL		TI411						
COFDM modulator	_							
TV system		DVBT / DVBH DN: DN 200744						
Output offset	MHz	-1/6, 1/8, 0, +1/6 0/41						
Mode		2K, BK, 4K (pvise) DN: Dn 302744						
Modulation		GPSK, 16GAM, 64GAM bits bis 300tas						
FE.C.		1/2, 2/3, 3/4, 5/6, 7/8 this bit 3007sa						
Guard interval		1/4, 1/8, 1/16, 1/32 pils lin 300744						
MER	dB	39 42.0						
RF output	MHr	47.8A2						
RF output Frequency range	MHz	47-862 0.25						
RF output Frequency range Frequency step	MHz	0,25						
RF output Frequency range Frequency step Output level	MHz dBpV	0,25 80 ±2,0						
RF output Frequency range Frequency step Output level Output level odjust	MHz dBpV dB	0,25 80 ±2,0 20						
RF output Frequency range Frequency step Output level Output level odjest Bondwidth	MHz dBpV dB MHz	0,25 80 ырл 20 8,7,6,5 онын						
RF output Frequency range Frequency step Output level Output level odjust Bondwidth Through loss in the mixture	MHz dBpV dB	0,25 80 ±2,0 20						
RF output Frequency range Frequency step Output level Output level odjust Bondwidth Through loss in the mixture	MHz dBpV dB MHz dB	0,25 90 cp 20 8,7, 6,5 trans 0,9 a.6.1						
RF output Frequency ronge Frequency step Output level Output level Output level Secretwidth Through loss in the mixture General features	MHz dBpV dB MHz	0,25 80 ырл 20 8,7,6,5 онын						
RF euriput Frequency range Frequency step Cutput level Couper level column Bornshvidth Through I loss in the mixture General Features Power sepply	MHz dBpV dB MHz dB	0.25 80 - app 20 8, 7, 6, 5 own - 0.9 wh +3,3 +52 +12						
RF eutput Frequency segge Frequency step Outpet level Outpet level Outpet level Outpet devel Benchvidth Through loos in the microse General Features Power sepply Operating T close to equipm	MHz dBpV dB MHz dB	0.25 00 × 20 20 8.7, 6.5 Seats 0.9 × 6.1 4.3,3						
RF output Frequency seage Frequency step Output level Output Outpu	MHz dBpV dB MHz dB	95 co   95 co   95 co   10						
RF euriput Frequency varge Frequency step Outport level Outport level Browleid Browl	MHz dBpV dB MHz dB	9.23 80 - 10 29 - 20 19 - 20 19 - 20 10 - 2						
RF euriput Frequency serge Frequency serge Frequency step Cutpet level Cutpet level dept Bendwidth Through loss in the midrare General Sectures Power sepply Operating T close to equipm Secen T with/without los Toucholos index Units per peoding Units per peoding Roding weight	MHz dBpV dB MHz dB	0.25 80.20 20 8.7,6.50000 6.7,6.50000 6.9401 4.33 4.52 4.13 4.52 4.10 4.0400 10.055440 10.055440						

CODE			9120213				
MODEL			TT-312				
TV system		DV	B-S / DVB-S2 → DVB-T/D <sup>a</sup> th 300421 th 302307 th 300744	rs-H			
Connection			F Female				
Number of inputs			1				
Number of output channels			1 à 2 (adjacent)				
DVB-S/S2 receiver							
Frequency range	ANHy		950 - 2150				
Frequency step	KHz		1				
requestly sup			DiSEoC 2.0				
LNB power supply	V		+13/+18 (0/22KHz)				
	mA		3.50 max.				
Symbol rate	Mhaud		1 45				
Diploxing through loss	modec		1.040.2				
DVB-S2 receiver			1,000,0				
	dBuV		45 95				
Input level	dBm		-6313				
F.E.C. QPSK	000	Auto 1/	2, 3/5, 2/3, 3/4, 4/5, 5/6,	8/0 0/10			
T.E.C. GEORGE		DV9: EN 302307					
F.E.C. 8PSK		Auto, 3/5, 2/3, 3/4, 5/6, 8/9, 9/10					
		DV8: EN 302307					
Roll-Off	dB	0,35/0,25/0,20					
DVB-S receiver							
Input level	dβμV		4095				
	dBm		-6813				
F.E.C. QPSK			Auto, 1/2, 2/3, 3/4, 5/6, 7,	/8			
		DV9: EN 302307					
Roll-Off	dB	0,35					
Conditional access							
Standard			DVB-CI EN 50221				
			Common Interface				
Compatibility			Aediaguard, Videoguard, Se				
		Nogr	avision, Irdeto, Cryptoworks,	Conox			
COFDM modulator							
TV system			DV8-T/DV8-H				
	+		EN 300744				
Output offset	MHz	-1/6, -1/8, 0, +1/8, +1/6					
Mode	+ +		2K, 8K, 4K IDV8-HI				
Mode			ZN, ON, 4N (DV6-H) DV8: 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	dΒμV		80±2,0				
Output level adjust	d8		20				
Bandwidth per channel	MHz		8, 7, 6, 5 сиън				
Through loss in the mixture	dB		0,9±1				
General features							
	V	+3.3	+5.2	+12			
	mA	1300	550+CAM	55+LNE			
Operating T clase to equipment	°C		-10+65				
Room T with/without fan	°C		-10+55/+45				
Protection index			IP 30				
Units per packing			1				
Packing weight	Ka		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	dBhA	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	O ±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
Power supply	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	+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			90264 50/60 Hz				
	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				
8 I. I		070 115 10							