



Free-To-Air Digital Satellite TV Reception Equipment

It is the solution to see DVB-S free-to-air channels on analog TVs.



DVB-S input signal



Solution for communities and hospitality



Analog output signal

SRF-011 Transmodulator

Main features

- Terrestrial TV reception, standard DVB-S / MPEG-2 (EN 300 421).
- Digital-to-Analogue Transmodulation Process (QPSK - AM) that presents the clear TV programmes transmitted in QPSK Sat-TV channels on conventional VHF/UHF channels (VSB vestigial side band; any TV system and Colour system).
- An SRF headend includes:
 - As many SRF receiving modules as free-to-air TV programmes to be distributed.
 - One HPA amplifier that amplifies the sum of the combined output TV channels from the receivers.
 - One or more CFP power supply.
 - One or more rack-frames or wall fixing base plates. The base plates can be joined horizontally.
 - Usually, one housing unit.
 - If the headend is voluminous, one or more AMX-400 combiners.

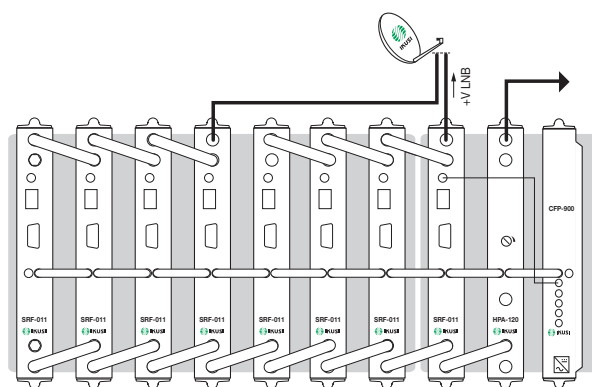
The SRF headends provide a TV multichannel signal whose level is appropriate to feed the distribution network. With a SRF installed in the headend, the end user does not require a Set Top Box or any additional devices to view the clear digital TV programs being distributed. An extension input at the HPA amplifier allows easy coupling of the wideband 47-862 MHz signal provided by another existing headend.

A SRF receiving module carries out the complete channel processing from the input to the output:

- tunes a QPSK Sat-IF digital channel in the 950-2150 MHz band,
- selects a TV programme from the multiplex received, and
- directs it to a conventional TV channel which is selectable throughout the 45-862 MHz band.

MODEL		SRF-011
REF.		4084
Output TV-channel spectrum		VSB (Vestigial Side Band)
Remote mode		NO
Output channel TV system		B / G / D / K / I / L
Output channel audio system		Mono ⁽¹⁾
Output channel colour system		PAL , SECAM , NTSC
Selectable output channel located between:	MHz	45 - 862
Input section (DVB-S)		
Input frequency band	MHz	950 - 2150
Input level	dBµV	44 ... 84
Input loop-through gain	dB	0 (±1)
AFC pull-in range	MHz	±5
Input symbol rate	MS/s	2 ... 45
MPEG-2 decoding section		
Video decoding		Main Profile @ Main level
Audio decoding		Layer II
Teletex - Subtitles insertion		Yes
Image Format Conversion		16:9 to 4:3 Pan&Scan and 16:9 to 4:3 Letter-box

V/A re-modulation section		
Adjustable video modulation depth	%	80 to 90
Adjustable audio peak deviation	kHz	±10 to ±50
Output section (TV channel)		
Adjustable output level	dBµV	65 to 80
Output loop-through loss	dB	1.1
Adjustable carrier level ratio	dB	12 / 16 (Mono ; A2: Audio1) 20 (A2: Audio2)
Weighted SNR	dB	> 60
Spurious in band	dBc	< -58
Broadband noise (ΔB=5 MHz)	dBc	< -75
General		
Supply voltage	VDC	+12
Consumption	mA	540
Operating temperature	°C	0 ... +45
Input RF connector type		(2x) female F
Output RF connector type		(2x) female F
DC connector type		banana socket
Programming interface		RS-232 / DB-9
Dimensions	mm	230 x 195 x 32



Example of SRF headend of eight clear digital satellite TV programs; four programmes access via a down lead cable and other four ones via another. Contains 8 receives, 1 amplifier and 1 power supply, all fixed on 2 base-plates.