

### 1. Tuner & Channel

Input Connector	1 x F type with Loop through
Output Connector	1 x F type 75 Ohm
Frequency Range	950MHz to 2150MHz
Input Impedance	75 Ohm
Signal Level	-25 to -65dBm
IF Frequency	480MHz
IF Bandwidth	36MHz
LNB Power & Polarity control	Vertical +13.5V ~ +14.5V Horizontal +17.5V ~ +18.5V
22KHz Tone	Frequency 22kHz ± 2kHz Amplitude 0.6Vp-p ± 0.2Vp-p
Demodulation	QPSK
Input Symbol Rate	2 - 45Mps
FEC Decoder	Convolutional Code Rate 1/2, 2/3, 3/4, 5/6, and 7/8 with Constraint Length K=7

### 2. MPEG Transport Stream A/V Decoding

Transport Stream	MPEG-2 ISO/IEC 13818 Transport Stream Specification
Profile & Level	MPEG-2 MP@ML
Input T/S Data Rate	80Mbit/S max
Aspect Ratio	4:3, 16:9
Video Resolution	720 x 576 (PAL), 720 x 480 (NTSC)
Audio Decoding	MPEG audio layer 1 & 2, musicam
Audio Mode	Stereo, Dual Channel, Joint Stereo, Mono
Sampling Rate	32, 44.1, and 48kHz

### 3. Memory

Flash Memory	up to 2M bytes
Program DRAM	up to 8 Mbytes
EEPROM	16 Kbytes

### 4. A/V & Data In/Out

SCART	TV x 1, VCR x 1, AUX x 1
RGB video out	TV SCART x 1, AUX x 1
0/12V Out	RCA x 1
CVBS video out	RCA x 1, SCART(TV, VCR, AUX)
S/PDIF	RCA x 1
Analog audio out	RCA x 2 (L-CH x 1, R-CH x 1)
	SCART(TV, VCR, AUX)
	Resolution 16bit DAC
	Output Level 2Vrms Max
	Volume & mute control
Data interface	RS232C, Baud Rate 9600 ~ 115200, 9 Pin D-Sub

### 5. PCMCIA

Number of Slot	2
Type	I, II DVB Common Interface Standard

### 6. Conditional Access

Embedded Viaccess	1 Smart Card Reader
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### 7. RF Modulator (Option)

RF-connect	75Ohm, IEC169-2, male/female
Output frequency	470MHz to 860MHz
Output channel	CH 21 ~ 69
TV standard	PAL D/K, PAL B/G, PAL I

### 8. Power Supply

Input Voltage	AC90 - 240V, 50/60Hz (Receiver & Positioner)
Type	SMPS
Power Consumption	240W Max (Below 7W max. For stand-by mode)
Protection	Separate internal fuse and chassis grounding and the input shall have lighting or electric shock protection

### 9. Positioner

Satellite Position	100
Azimuth & Skew Control	6 Push terminal (M1, M2, M.Pulse, +5Vdc, GND, Skew)
Output Power	36VDC, 5A max (10minute max, 50%)(SMPS)
Sensor Type	Reed or Hall Effect Switch
Ferrite Control	2 Push terminal

### 10. Physical Specifications

Size(W x H x D)	370mm x 60mm x 280mm
Weight	about 2.0 Kg

### 11. Environment

Operating Temperature	+ 5 °C ~ + 50 °C
Storage Temperature	- 40 °C ~ + 65 °C