

## FEATURES

High Definition and Standard Definition television in MPEG-2 and H.264 (MPEG-4).

Optional Hard Disk Drive.

System-on-chip 450 DMIPS processor.

5.1 digital audio.

Front panel alpha numeric display with navigation buttons.

HDMI connectivity with HDCP support.

Component video (Y Pb Pr) connectivity.

## BENEFITS

DVR functionality including time shift, recording and viewing separate programs, and instant or scheduled recording.

Available as a hybrid model with a DVB tuner for combining IPTV with terrestrial broadcasts.

Seamlessly combines TV channels in one channel table regardless of broadcasting method or video format.

KreaTV Application Platform as the set-top software makes the VIP1900 series compatible with other IP set-top models.

Multiple development environments available for operator-driven functionality and services.

Supports feature-rich applications and graphics.

May be used as the home network centerpiece, playing personal media files and showing picture slideshows on the TV set.

Pre-integrated with leading middleware applications and conditional access solutions.

# VIP1900 series

## Flexible High Definition IP Set-Top Series



The Motorola VIP1900 series extends the possibilities for broadband television. Advanced video formats and decoding of High Definition television (HDTV) are supported in all models, whereas a built-in hard disk drive for PVR and a DVB-T receiver are available as options.

The VIP1900 series reaches its full functionality thanks to the KreaTV Application Platform – the same set-top software platform used in previous generations of IP-STBs widely deployed among large telecom operators, making the different models compatible and possible to be installed in parallel. A single software platform to maintain and operate means huge savings in time and cost, and still you stay prepared for what the future may bring.

When selecting the VIP1900 series, you benefit from years of development, deployment experience and well documented reliability while you embrace the new features and possibilities that new technology brings.

## TECHNICAL SPECIFICATION

### HARDWARE

Microprocessor	RISC processor with integrated TV video processing and MPEG decoder, performance 450 DMIPS, 1.2 GFLOPS
Main memory	128 MB DRAM
Video memory	32 MB DRAM
Flash memory	4 MB
Accessories	Infrared remote control Infrared keyboard (optional)

### OPERATING SYSTEMS

Linux

### STREAMING VIDEO

MPEG-1 (SD)	800 kbits/s to 3 Mbits/s, CIF 352x288
MPEG-2 (HD and SD)	transport stream - PAT, PMT, video and audio streams, constant and variable bit rate, 2-25 Mbit/s, up to MP@HL 1080i@30 fps
H.264 (HD and SD)	PAT, PMT, video and audio streams, up to 20 Mbit/s, up to HP@L4.1 (1080i@30 fps)
High definition video	1280x720@50 or 60 fps (progressive scan) 1920x1080@50 or 60 fps (interlaced scan)
4:3 and 16:9 video format	format detection, scaling to letterbox, center cut-out and SCART signaling

### VIDEO ON DEMAND

Interactive Video-on-Demand (IVOD) and Near Video-on-Demand (NVOD)
Protocol RTSP
Verified compliance with leading video server suppliers

### STREAMING AUDIO

Audio types	MPEG (Layer 1,2,3), PCM, AC3, AAC
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### SECURITY

SSL	version 3.0, 64 and 128 bits
PKI	box login, encryption/decryption (Optional)
Macrovision copy protection	ver. 7.01 (Optional)

### GRAPHICS

Computer graphics	24 bits/pixel RGB
Resolution	720x576 pixels (PAL), 720x480 pixels (NTSC)
Video	24 bits/pixel RGB
Picture-in-Graphics	
On Screen Display (OSD)	
Alpha blending	
Color keying	
Graphics accelerator	2D
Spatial - temporal deinterlacing	using motion detection and estimation
Flicker filtering of graphics	

### EXTERNAL INTERFACES AND CONNECTORS

#### Front panel

Status indication	LED
IR-receiver	56 kHz
Smartcard reader	ISO 7816-1/2/3/4
Display	Alpha numeric

#### Rear panel

Ethernet	1 x RJ45 10/100 Base-T
Standard definition video	SCART for RGB, S-video and composite out
High definition video	HDMI with HDCP support, component video (Y Pb Pr)
Auxiliary devices	SCART (composite in/out and RGB loop through)
Analog stereo	Left/right RCA stereo connectors
Digital 5.1 sound	optical and coaxial S/PDIF
USB port	version 2.0
Mains power	connector and switch

### Electrical values

External power supply	PSU 6V (VIP1910 and 1920 models)
Internal power supply	110V-240V (VIP1960 and 1970 models)
Power consumption	<7 W full load (VIP1910 model)

### PHYSICAL

Dimensions	250 x 195 x 60 mm (VIP1910 and 1920 models) 340 x 220 x 60 mm (VIP1960 and 1970 models)
Weight	1.2 kg (VIP1910 and 1920 models) 2.5 kg (VIP1960 and 1970 models)

## MODEL SPECIFIC OPTIONS

### DVR (VIP1960 and 1970 models)

Hard disk drive	80 GB (other sizes optional)
Recording	Time shift and scheduled recording
Recording formats	MPEG-2, H.264
Trick play	rewind, fast forward, pause

### DVB-T (VIP1920 and 1970 models)

DVB-T	[ETSI EN 300 744]
Extra connectors	2 x DIN Jack for DVB-T input and loop through



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