

# TITAN 30 Video Codec



## General

The TITAN 30 Video Codec can operate over its integrated E1/T1 Interface up to 2-Mbit/s; over X.21 as well as RS449 with Satellite Modems and via its 6 x X.21 Interfaces and Terminal Adapters, over the ISDN Network. TITAN can be used for Video Conferencing and, with its integrated special features such as Motion Video Cursor, is ideal for Telemedicine applications. It can be connected to ISDN and 2-Mbit/s/T1 lines. In 2-Mbit/s Application the whole 2-Mbit/s are filled with coded Video data.

## Functions

TITAN contains a Video Crossbar for the connection of up to 6 Cameras and 6 Monitors, TITAN has an Interface for the direct control of two Cameras with Pan & Tilt Heads. TITAN can add and drop channels during a call without breaking the connection as well as transmitting Data over its Low Speed Data (LSD) Channel and its High Speed Data (HSD) Channel. A high resolution picture can be transmitted by use of an optional Graphics Codec.

- Video Codec with multiple network Interfaces: E1(2-Mbit/s), T1, X.21, RS449 and ISDN (over Terminal Adapters)
- Operating according to the H.320 Video Conference Standard
- Audio Coding according to G.722 (7-kHz), G.728 (16-kbit/s at 3.5-kHz), G.711
- Integrated Echo Canceller with double talk capability and Automatic Calibration
- Motion Video Coding according to H.261 with CIF resolution (288 Lines x 352 Pixels) 30 Frames/s at 1920-kbit/s
- Remote Diagnostics, Remote Control and Remote Software Download
- Can be connected via X.21-interfaces and ISDN Terminal Adapters to ISDN
- Integrated inverse multiplexer according to both H.221 and ISO/IEC 13871 (Bonding Mode 1)
- Automatic selection according to H.244 of the inverse multiplexing mode

## Operation

### • PC

PC Software is delivered with the TITAN to enable the Codec to be controlled. The Graphic User Interface allows the TITAN to be configured simply. As well as the local configuration, the far-end Codec can also be configured and controlled over the inband signalling.

### • On Screen Display (OSD)

The On Screen Display function can be activated over a 3-button mouse connected to the TITAN. Self explanatory, uppercase text, allows for simple control.

## Technical Data

### • Network Interfaces

- E1(2-Mbit/s)/T1(1.544-Mbit/s) G.703/G.704
- X.21/RS449 128...1920-kbit/s
- 6xX.21 incl. Inverse Multiplex

### • Signalling Procedures

- ITU-T H.244, H.242, H.243
- ITU-T H.331
- ITU-T H.221, ISO/IEC 13871 (Bonding Mode1)

### • Audio Coding

- 7-kHz (48/56-kbit/s) ITU-T G.722
- 3.1 kHz (56-kbit/s) ITU-T G.711
- 3.5 kHz (16-kbit/s) ITU-T G.728

### • Video Coding

- Coding standard ITU-T H.261
- Picture format Full CIF
- Frame rate 7.5,10,15,30 Hz
- Data rate up to 1920-kbit/s

### • Audio Interfaces

- 2xMicrophone XLR sockets
- Recorder in/out RCA Phono
- Line in/out XLR sockets
- Telephone in/out RCA

## Ordering Information:

TITAN Basic	229290
TITAN Graphics Codec	229520
IMUX ISO/IEC 13871 (Bonding Mode 1)	335294

## Options

### • Graphics Codec

The Graphics Codec encodes the picture in JPEG (Joint Picture Experts Group) format which gives a resolution 4 times higher than the motion video picture. From both ends, a painting feature for the graphics picture is implemented with the help of a cursor symbol.

### • Inverse Multiplexer Software ISO/IEC 13871 (Bonding Mode 1)

A second procedure for calculating the delays in the ISDN B-Channels which uses a fixed compensation (calculated during call set-up).The software includes also an automatic search mode according to H.244.

### • Video inputs

- 6xCVBS, or BNC
- 4xCVBS+1xY/C,or BNC
- 2xCVBS+1xY/C+1xRGB,Syn BNC

### • Video outputs

- 6xCVBS, or BNC
- 2xCVBS+1xRGB,Syn BNC

### • Data Interfaces

- LSD (Low Speed Data) V.24/RS232
- HSD (High Speed Data) V.11/X.21
- USER Input/Output TTL/SUB-D

### • User Interfaces

- PC Control V.24/RS232
- Mouse V.24/RS232
- Camera Control RS485

### • Power Supply/Dimensions/CE Label

- Power Supply 90...253V AC
- Frequency 50/60 Hz
- Power consumption typ. 100 VA
- Dimensions 133x449x450 mm