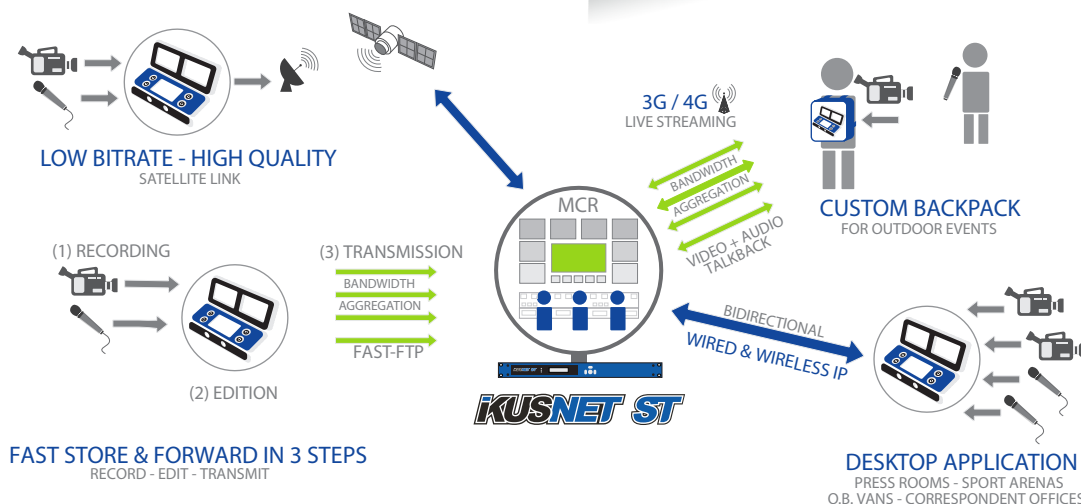# IKUSNET ST

The Base station companion for Ikusnet ENG Portable News Contribution System

Ikusnet ST is a rack mounting H.264 video codec that can simultaneously transmit and receive an IP video stream from any Ikusnet family video codec. It supports a separate bidirectional audio stream as a IFB/Talkback audio channel to send and receive voice communications between field operators and MCR/Studio, this is concurrent with the main video and audio program feeds.

Ikusnet ST supports file recording on an optional internal hard disk or an external storage device (USB). Files can be shared as a "Windows network share", or transferred to an FTP server. When sending files from Ikusnet ENG/BP to Ikusnet ST, the Ikusnet ENG/BP can take advantage of bandwidth aggregation using all of the available IP links on the unit to make file transfer much faster and reliable.

Ikusnet ST has been designed to be as easy to use as possible and can be operated either from the front panel menu or built-in web interface. Ikusnet ST can be controlled remotely via IP.

Comprehensive user definable presets allow the unit to be setup in advance, so that non-technical users can accomplish live broadcasts quickly and easily.

LOW BITRATE - HIGH QUALITY
SATELLITE LINK

3G / 4G LIVE STREAMING

MCR

BANDWIDTH AGGREGATION

VIDEO + AUDIO TALKBACK

CUSTOM BACKPACK
FOR OUTDOOR EVENTS

(1) RECORDING

(3) TRANSMISSION
BANDWIDTH AGGREGATION
FAST-FTP

(2) EDITION

BIDIRECTIONAL WIRED & WIRELESS IP

FAST STORE & FORWARD IN 3 STEPS
RECORD - EDIT - TRANSMIT

DESKTOP APPLICATION
PRESS ROOMS - SPORT ARENAS
O.B. VANS - CORRESPONDENT OFFICES

Ikusnet ST Technical Features

GENERAL FEATURES

- 2 Fast Ethernet interfaces to split data and control or for bandwidth aggregation
- Assembly of demultiplexed Video streams
- Auxiliary storage via USB or Internal hard disk with Windows compatible file sharing
- FEC with interleaving and Active Packet Recovery to recover lost packets
- Error concealment to reduce the impact of packet losses
- Bitrate Adaptive Video Encoding (BRAVE) for audio and video compression
- Automatic jitter buffer
- Bidirectional IFB/Talkback audio channel
- Transparent auxiliary data and GPIO transmission (remote contact closures)
- Real time Network Monitoring Tools and statistics

VIDEO FEATURES

- 1 HD-SDI/SD-SDI/HDMI/Composite Video input
- MPEG4 AVC/H.264 SD and HD compression
- 2xSD/HD-SDI video monitor outputs
- Video Genlock input
- Broadcast quality BNC connectors
- Re-streaming in MPEG-TS & RTMP format to third party decoders
- 1080i to 720p and 576/480i to 576/480p de-interlacer
- Factory and custom encoding presets for fast operation
- DVB/ASI interface with MPEG-TS
- File recording, playing and FTP reception and re-transmission
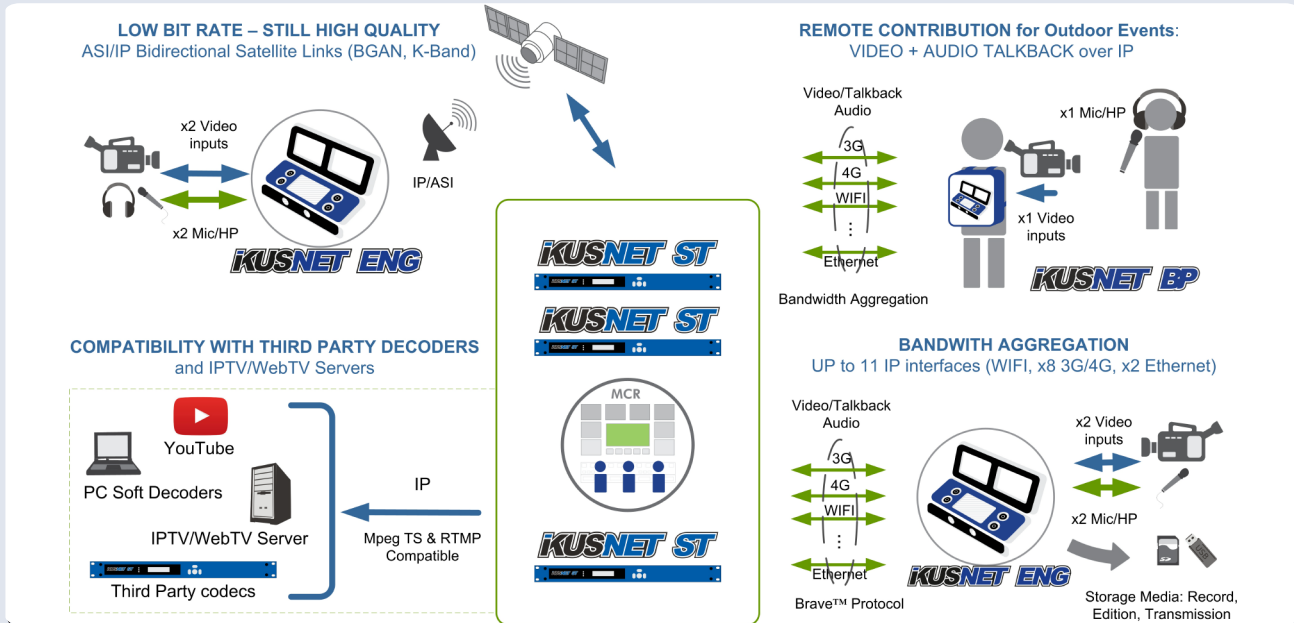- Multiple protocols: MpegTS, RTMP, BRAVE

AUDIO FEATURES

- Audio inputs to mix with SDI embedded audio or with IFB/Talkback
- Inherits AAC highest quality audio compression from Prodys Audio Codecs
- Analog and Digital audio interfaces
- AAC encoding from 8 to 384Kbps
- AAC ELD encoding of the talkback channel for low delay audio
- VU-meters on screen
- De-embeding of SDI audio to digital audio output
- Up to 4xSDI embedded audio channels

IKUSNET ST DECODER

The Base station companion for Ikusnet BP

Ikusnet ST Decoder is a Video over IP Decoder that receives audio and video from Ikusnet ENG or BP Portable Video codecs. It supports a separate bidirectional audio stream as a IFB/talkback audio channel to send and receive voice communications instructions between field operators and MCR/Studio, this is concurrent with the main video and audio program feeds. Ikusnet ST Decoder inherits most of the features from its predecesor the Ikusnet ST, including of course its world class IP streaming technology and Video Compression Quality except that it is a only a Decoder.
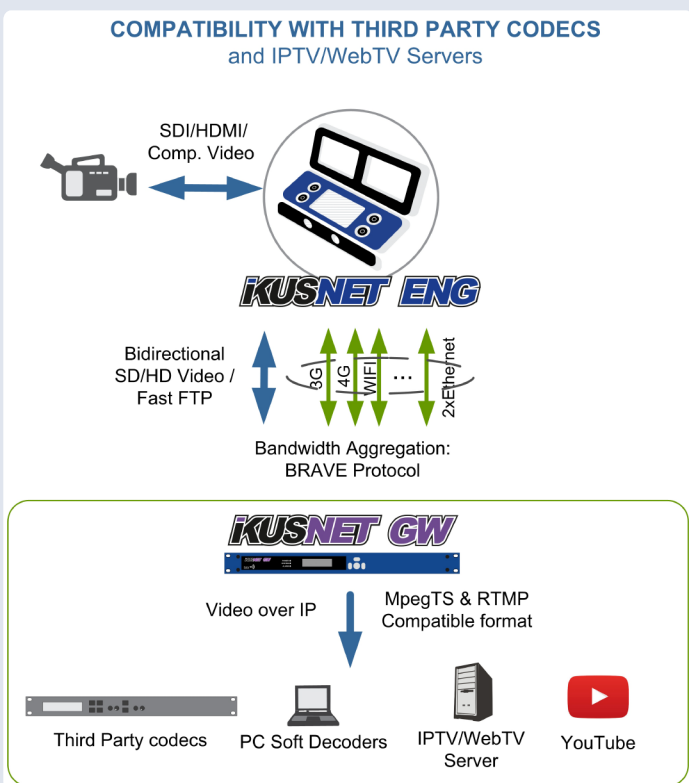
LOW BIT RATE – STILL HIGH QUALITY
ASI/IP Bidirectional Satellite Links (BGAN, K-Band)

x2 Video inputs

IP/ASI

x2 Mic/HP

IKUSNET ENG

COMPATIBILITY WITH THIRD PARTY DECODERS
and IPTV/WebTV Servers

YouTube

PC Soft Decoders

IPTV/WebTV Server

IP

Third Party codecs

Mpeg TS & RTMP Compatible

IKUSNET ST
IKUSNET ST

MCR

IKUSNET ST

REMOTE CONTRIBUTION for Outdoor Events:
VIDEO + AUDIO TALKBACK over IP

Video/Talkback Audio

3G
4G
WIFI
:
Ethernet

Bandwidth Aggregation

x1 Mic/HP

x1 Video inputs

IKUSNET BP

BANDWITH AGGREGATION
UP TO 11 IP interfaces (WIFI, x8 3G/4G, x2 Ethernet)

Video/Talkback Audio

3G
4G
WIFI
:
Ethernet

Brave™ Protocol

x2 Video inputs

x2 Mic/HP

IKUSNET ENG

Storage Media: Record, Edition, Transmission

IKUSNET E10   IKUSNET D10

Prodys expands Ikusnet Video Coding Family with Ikusnet E10 and D10 for high quality video distribution over fixed IP links, featuring 4:2:2 Chroma sampling and 10 bit color depth.

COMPATIBILITY WITH THIRD PARTY CODECS
and IPTV/WebTV Servers

SDI/HDMI/ Comp. Video

IKUSNET ENG

Bidirectional SD/HD Video / Fast FTP

3G 4G WIFI … 2xEthernet

Bandwidth Aggregation: BRAVE Protocol

IKUSNET GW

Video over IP

MpegTS & RTMP Compatible format

Third Party codecs   PC Soft Decoders   IPTV/WebTV Server   YouTube

IKUSNET GW

Ikusnet GW allows Ikusnet ENG & BP to forward to thrird party codecs when bandwidth aggregation has been used to stream video from the transmitting device.

Ikusnet GW assembles all pieces of the video stream and forwards it in MPEG-TS and RTMP compatible format to third party decoders, building on your existing investment in video decoders to receive live broadcast feeds from Ikusnet ENG or BP.

Ikusnet GW supports a single concurrent bidirectional IFB/Talkback audio channel for coordination between field operators and the MCR/Studio.

News contribution Video Codecs
Wireless and wired IP and Satellite