# HyperArray (Very High Density) Voice Packetizer



The OptiLogix HyperArray is a Very High Density Voice Packetizer for building large scale Analog, Digital Extension and E1/T1 PRI based TDM Call Recording systems.

This Dual-PSU 3U 19" rackmount model can non-intrusively tap and convert upto 600 TDM channels (20 E1's) into IP streaming packets. 10 hot-swap slots are available to build mixed recording interface solutions whereby all type of interfaces can be combined.

Embedded DSP arrays for D-channel decoding, voice processing and IP packet streaming.

Rugged design, low power consumption, redundant front accessable hot-swap power supplies and Analog, Digital and TDM module hot-swapability results in unmatched reliability.

D-channel signalling supports Call Setup, Connect, Clear, DDI number and CLI number decoding. Supports all major ISDN variants, QSIG, DASS-2 and DPNSS.

Generic IP stream format (the OptiLogix HyperStream open format) available for using HyperPacket devices with 3<sup>d</sup> party Windows or Linux based IP recording systems.

Despite the large number of recording channels possible, only a single (virtual) recording server is required.



#### **Features and Benefits**

3U height 19" rackmount model with 20 E1 or T1 PRI interfaces (upto 600 TDM channels)

Non intrusive and undetectable high impedance passive monitoring

Dialled number and Caller ID signalling support (PRI and Analog interfaces)

Digital Signal Processor Arrays for voice streaming and protocol processing

Based on the OptiLogix V32 DSP architecture for unmatched performance and reliability

Uses the OptiLogix generic API and driver. Fully supported by HyperEngine

Supports Windows Server 2003-2019 and Windows 7, 10 and 11

Remote TCP/IP accessibility for system configuration and FLASH memory upgrading

Fully stand-alone embedded operation

Redundant front accessable hotswap power supplies and hotswap facility for the plug-in streaming modules

Supports 64kbit/s A-law and high quality compressed 36kbit/s speech encoding for reduced IP bandwidth

Highly secure encrypted IP streaming when used with HyperEngine

HyperStream open format available for integration with 3<sup>rd</sup> party Windows or Linux based IP recording systems

CE, FCC and RoHS 3 compliance

# **Technical Specifications**

Mechanical characteristics: 3U height 19" rack Operating temperature: 0°C to +60°C

Humidity: 5% to 80% non-condensing

Power requirements (115V version): 100V - 120V AC 50-60Hz (two IEC power sockets) 200V - 240V AC 50-60Hz (two IEC power sockets)

Power consumption 50 Watts (rack only), 5-10 Watts (for each streaming module)
Operating systems: Windows only when using HyperEngine. Operating system independent when using the HyperStream open format

### **Interface Specifications**

Primary Rate interface: E1 (2.048Mbit/s) or T1 (1.544Mbit/s) model dependent

AC impedance: 1100 ohms

Maximum tap length: 10 m (unterminated), 100 m (terminated)

Protocols: All major ISDN variants, QSIG, DASS-2 and DPNSS

Basic Rate interface: 4 wire S<sub>o</sub> bus
AC impedance: Line Matched
Maximum tap length: 500 m
Protocols: Euro-ISDN

Digital handset interface: 2 wire bus AC impedance: Line Matched

Maximum tap length: Typical 500 m (PBX model and cable quality dependent)
Protocols: All major PBX supported (DigitalVox audio triggering)

Analog handset / trunk interface: 2 wire voltage start or line level audio triggering (Vox)

DC/AC impedance: Infinite / 3000 ohms

Maximum tap length: 5000 m

Signalling: Ring detection, voltage detection, DTMF detection for dialled numbers, FSK Caller ID detection, voice activity detection

#### **Audio Processing**

Upstream and downstream audio gain: Programmable via TCP/IP

Frequency response: 300-3400Hz (all compression modes)

Speech encoding/compression: 64kbit/s A-law (G.711), 36kbit/s proprietary encoding

# Safety and EMI Certifications

Safety, emissions, immunity, EMC: EN 60950, EN 55022, EN 55024, EN 61000-6-2, EN 61000-6-3

Compliance: CE, FCC and RoHS 3
Estimated MTBF: 600.000 hours
Warranty: 2 years

The OptiLogix policy is one of continuous development and consequently the equipment may vary in detail from the description and specification in this publication

