# 3G ULTRA Sound Transceiver

VBS-HDIP-ST1

Just Add Power

## Mix audio and video in new and unique ways.

Use the Ultra 3G ST1 Sound Transceiver to add a stereo audio source to a Just Add Power system, or to extract stereo audio from an existing system source.

This audio-only device works seamlessly with all our other products in a 3G Ultra system. Thanks to our unmatched scalability, this device is also compatible with our 2G Omega systems.


Combine Just Add Power Transmitters, Receivers and the Sound Transceiver in the same installation. You can watch the big game while listening to radio commentary, give a presentation by mixing PC video with microphone audio, or even add audio return channel from a SmartTV.

## Features

**Integrated Endpoint Control**
Control endpoints with RS232 & IR

**Scalability**
Fully compatibile with all 3G products

**Stereo Audio**
Stereo audio with variable audio -46.5dB to +12dB

Input stereo audio to play on any other Receiver

Output stereo audio from any other Transmitter

**Transceiver**
Audio Input – Transmitter Mode
Audio Output – Receiver Mode

Set to Transmitter or Receiver mode by a jumper on the bottom of the device

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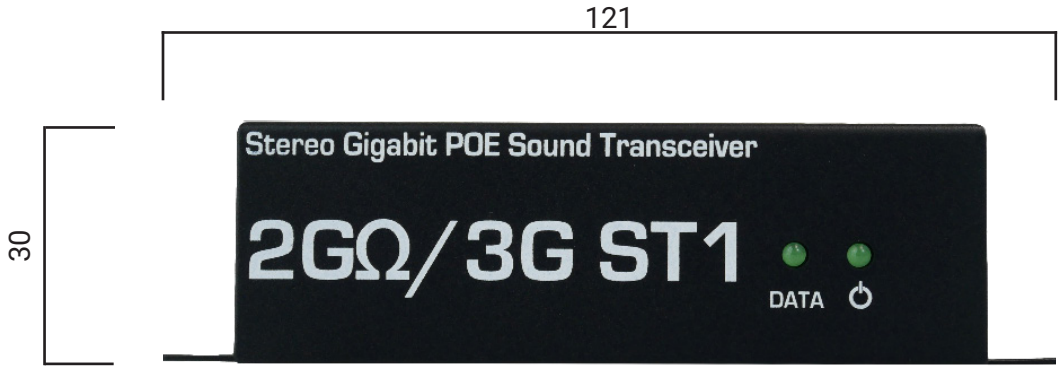
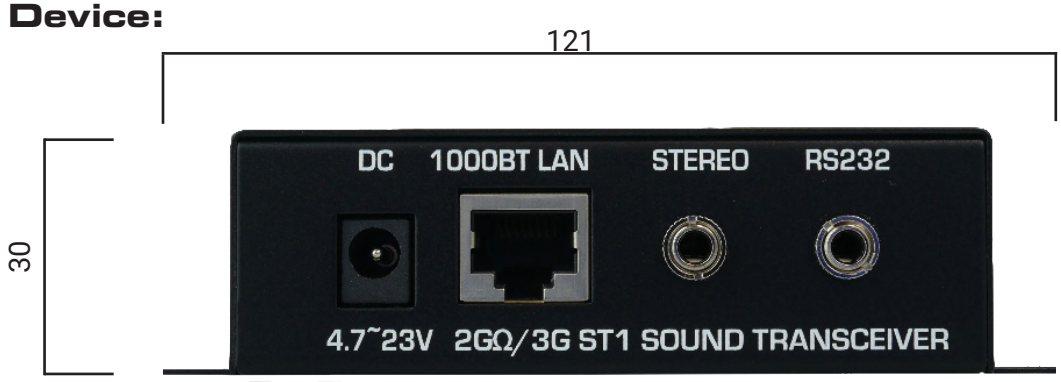
## Front of Device:




All measurements in millimeters (mm)

## Back of Device:




All measurements in millimeters (mm)

## Specifications

| | |
|---|---|
| **Bandwidth** | 180-500 Mbps |
| **Compliance** | RoHS/FCC/CE |
| **Dimensions & Weight** | 121x30x125mm/5.0x1.2x4.9 inch<br>0.27kg / 0.6 lb |
| **Encryption** | AES-128 Encryption |
| **Operating Temp** | 0-60 °C / 32-140 °F |
| **POE** | 10 watts maximum |
| **Ports** | Gigabit Ethernet<br>Stereo In/Out<br>3.5mm RS232 w/ null modem |
| **Power Supply (not included)** | ~4.7-23V<br>5.5mm/2.1mm, positive tip |
| **Supported Audio** | 2-channel audio<br>192kHz/24-bit |

# 3G ULTRA
## Product Line Specifications

Just Add Power

## Specifications

### Encoding/Decoding

| | |
|---|---|
| **Video Codec** | AGIC-G1 Proprietary Visually Lossless Video Codec |
| **Audio Codec** | Proprietary I2S Lossless Audio Codec |
| **Bit Rates** | 300 to 850 Mbps |
| **Latency** | Ultra-low latency<br>16ms @ 1080p60 & 720p60<br>33ms @ 4K30 |
| **Streaming Protocols** | IP, UDP, TCP, ICMP, IGMP |
| **Copy Protection** | HDCP 2.2, AES-128 Encryption |

### Video

| | |
|---|---|
| **Maximum Resolutions** | High Dynamic Range HDR10<br>4K30 4:4:4 HDR 8-bit<br>4K30 4:2:0 HDR 12-bit<br>1080p60 4:4:4 HDR 12-bit |
| **Input Signal Types (Encoder)** | HDMI |
| **Output Signal Types** | HDMI |
| **Scaler (Decoder)** | 720p up to 4K30 with many options inbetween |

### Audio

| | |
|---|---|
| **Input Signal Types** | HDMI, Analog Stereo |
| **Output Signal Types** | HDMI, Analog Stereo |
| **Digital Formats** | Dolby Atmos, DTS:X, Dolby TrueHD, DTS-HD, Dolby Digital, Dolby Pro Logic, DTS, LPCM up to 8 channels |
| **Analog Formats** | Stereo 2-channel up to 96 kHz |

### Power

| | |
|---|---|
| **Power Consumption** | 10 watts maximum during operation<br>0 watts when idle |

### Compliance

CE, FCC, RoHS

### Communication & Control of External Devices

| | |
|---|---|
| **Ethernet** | 1Gb RJ-45 for control and AV |
| **USB** | USB 2.0 |
| **Serial/RS-232** | Bi-directional control and monitoring |
| **HDMI** | CEC, EDID (Transmitter) |
| **Infrared (IR)** | Available with add-on |

### Connectors

| | |
|---|---|
| **LAN** | 8-pin female RJ-45 1000Base-T<br>POE (802.3af) |
| **HDMI Input** | HDMI Type A female |
| **HDMI Outputs** (Transmitter loopout & Receiver output) | HDMI Type A female |
| **RS232** | 3.5mm female |
| **Stereo Output** | 3.5mm female |
| **USB (Receiver)** | USB Type-A female (x2) |
| **USB (Transmitter)** | Micro-USB female (x1) |

### Environmental

| | |
|---|---|
| **Cooling** | Convection / no fan (no moving parts) |
| **Temperature** | 0-60 C / 32-140 F |
| **Heat Dissipation** | 34 BTU/hr |
| **Acoustic Noise** | 0 dBA |