

# Specifications



## OPTIX Series 3

Fiber Optic Remote Antenna Distribution System

OPTIX is a low noise RF to fiber optic (RFoF) conversion system designed to facilitate the remote placement of wireless audio antennas. It converts radio frequency energy arriving from an antenna source into an optical signal, sends that signal down a length of fiber-optic cable, and converts the signal back into RF.

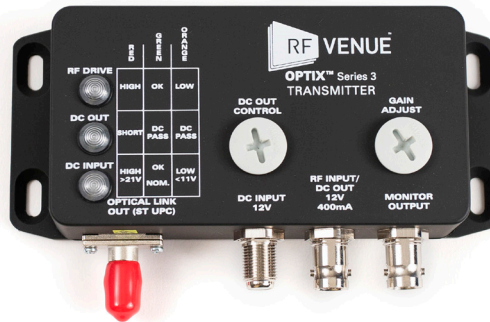
### Required Accessories (not included)

Fiber optic cable, 1310 nm single mode, ST/UPC

### Recommended Accessories

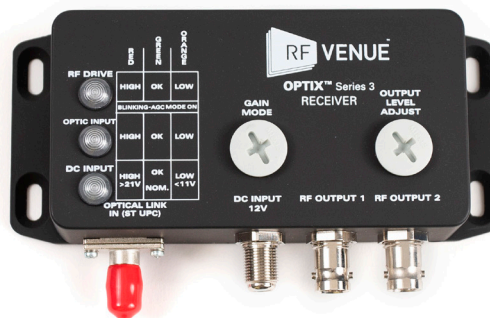
Fiber optic cleaning tool  
Screw Driver

Transmitter Module



DC Control Preset: 0\*  
Gain Adjust Preset: A\*

Receiver Module



Gain Mode Preset: 1\*  
Output Level Preset: 2\*

\*Changing these settings is only recommended for advanced users. Contact us for more info.

Usable dynamic range .....	60 dB
Input noise floor .....	-100 dBm
Max usable signal.....	-25 dBm (Do not exceed or clipping will occur)

**IMPORTANT:** Maximum RF input power is 0dBm/1mW. Do not exceed. Do not connect Optix modules to IEMs, IFBs, intercoms, or other Tx devices without attenuating input. Exceeding input voids warranty.

**IMPORTANT:** Fiber-optic connector end-face must be kept clean. Clean only with tools designed for fiber-optic component cleaning. Do not clean with cloth or paper.

**WARNING:** To avoid electrical shock, do not remove covers. Do not expose to moisture.

#### Electrical

Typical operating frequency .....	175-213, 470-698, 900-960 MHz
VSWR avg. ....	< 2.5:1
Impedance (nom).....	50Ω
Max RF input power .....	< 0 dBm / 1 mW
DC operating voltage .....	5-22 V
Power supply voltage .....	12.25 VDC
Tx Module Power Draw.....	~166 mA @ 12VDC
Rx Module Power Draw.....	~258 mA @ 12VDC
Optical Tx wavelength.....	1310 nm

#### Physical

Dimensions (each, including flange and connectors) .....	138 mm X 77 mm X 33 mm
Tx weight .....	223 g
Rx weight.....	229 g
Operating temperature.....	-25C-75C
RF Connectors.....	BNC female
Optical connectors .....	ST/UPC

# Distribution Diagram

## SINGLE CHANNEL

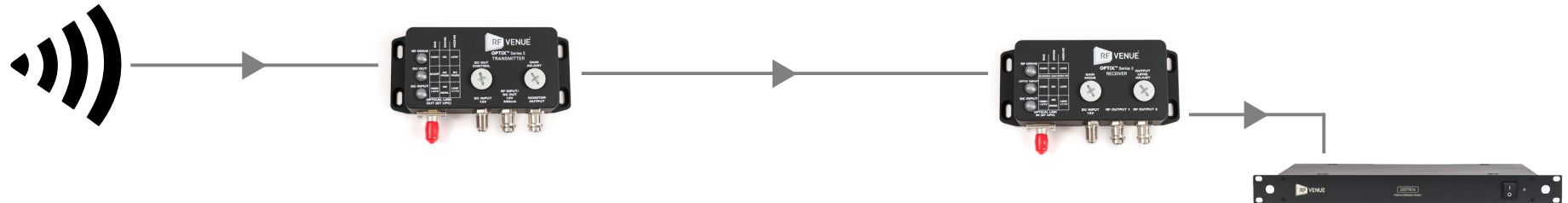
Single antenna sends RF signal via coax to Optix Tx

Single RF Optix Tx module converts RF to light

Fiber optic cable transports signal up to 5 km

Single RF Optix module converts light back into RF and outputs to copper coax

RF sent to distribution system or receivers on rack



## DIVERSITY (2) CHANNEL

Diversity pair of antennas send RF signals via coax to Optix Tx

Pair of RF Optix Tx modules converts RF to light

Fiber optic cable transports signal up to 5 km

Pair of RF Optix modules convert light back into RF and output to copper coax

RF sent to distribution system or receivers on rack

