Specifications & Directions

OPTIX

Fiber Optic Remote Antenna Distribution System

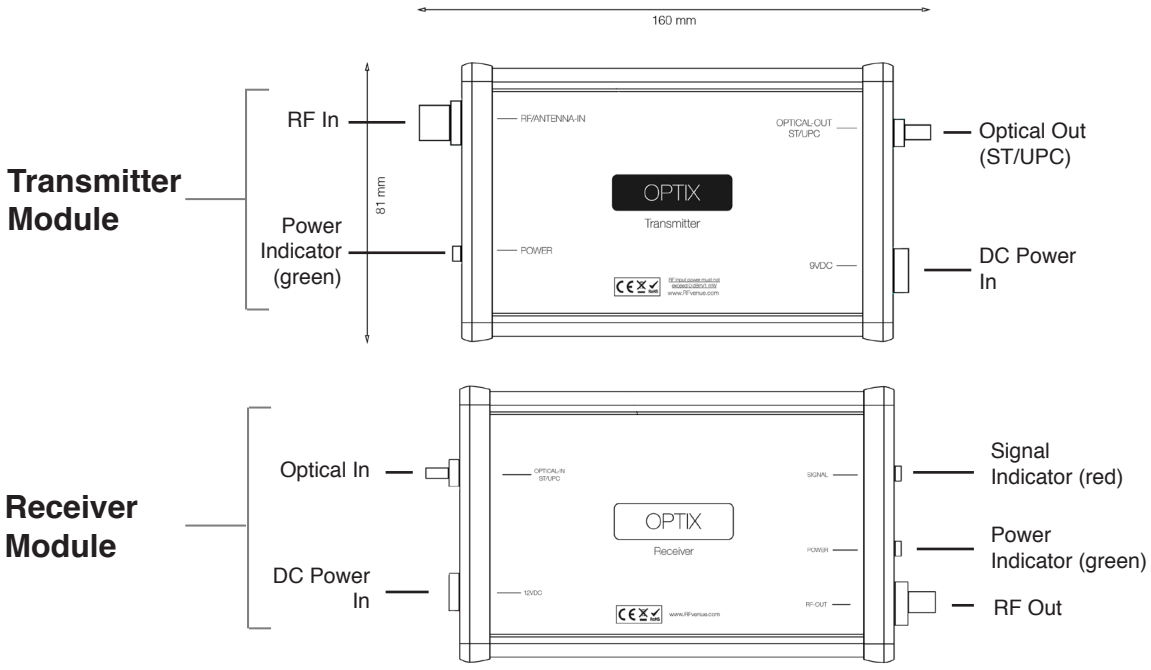
OPTIX is a low noise RF to fiber optic (RFoF) conversion system designed to facilitate the remote placement of wireless audio antennas. It converts radio frequency energy arriving from an antenna source into optical signal, sends that signal down a length of fiber-optic cable, and converts the signal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

Required Accessories (not included)

Fiber optic cable, 1310 nm singlemode, ST/UPC

Recommended Accessories

Fiber optic cleaning tool



Dynamic range	60 dB
Input noise floor	-75 dBm
Max usable signal	-15 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 cover. Do not expose to moisture.

Electrical

Operating frequency	450–850 MHz
VSWR avg.	< 2.5:1
Impedance (nom)	50Ω
Max RF input power	< 0 dBm / 1 mW
DC operating voltage	7–12 V
Power supply voltage	9VDC
Tx Module Power Draw	~130 mA @ 9VDC
Rx Module Power Draw	~10 mA @ 9VDC
Optical Tx wavelength	1310 nm

Physical

Dimensions (both modules)	160 mm X 81 mm X 47 mm
Tx weight	100 g
Rx weight	130 g
Operating temperature	-25C–75C
RF Connectors	BNC female
Optical connectors	ST/UPC

Distribution Diagram

SINGLE CHANNEL

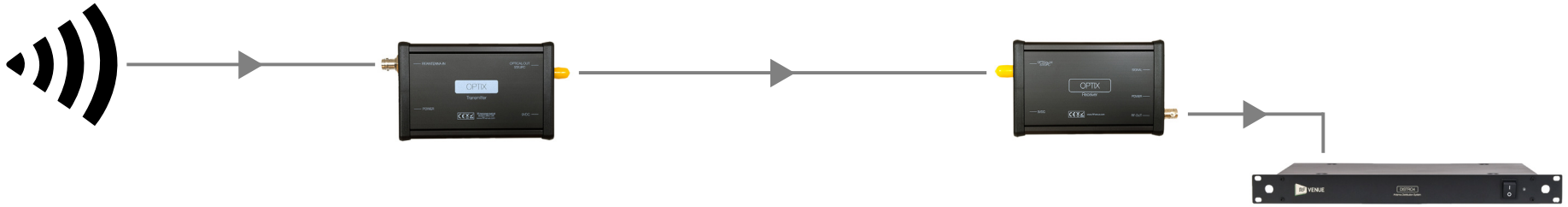
Single antenna sends RF signal via coax to Optix Tx

Single RF Optix Tx module converts RF to light

Fiber optic cable transports signal any distance

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 any distance

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

RF sent to distribution system or receivers on rack