AIB OVERVIEW

The Antenna Interface Box (AIB)

The Antenna Interface Box (AIB) interfaces a broadband antenna or other RF equipment with an electrical-to-optical converter for use with long-haul RF over fiber systems.

This interface box allows an operator to transport RF spectrum data over long distance from remotely located sensors. The unit is usable from 2 MHz to 40 GHz and provides input antenna selection, pre-selection, attenuation and RF amplification.

"Comprehensize RF over fiber solutions for a variety of long-haul & critical RF applications."

The AIB includes an embedded processor with Ethernet interface, automated gain control and internal calibration source.

The unit is fully controllable and reports health & status information and other telemetry information via the Ethernet interface. Ideal for compound, ship, or large facility monitoring or remote RF monitoring.

Specifications

Size	14" x 15.5" x 4" max.
HF External Input Frequency Response	2 MHz - 100 MHz
VHF External Input VHF External Input	20 MHz - 480 MHz
UHF External Input Frequency Response	480 MHz – 2.5 GHz
SHF External Input Frequency Response	2.5 GHz – 18 GHz
RF Switch Type	Solid State
Switch Speed	10 microseconds max
Isolation (Between antenna bands excluding antenna coupling.)	50 dB min.
Calibration Tone: **Frequenc** **Amplitude: (into E-O)** **Stability** **Control**	 TBD MHz -20 dBm max. – 40 dBm min. TBD ON/OFF, HI/LOW
LNA Gain with 0 dB Attenuation (AIB RF Input to E-O Input)	+28 dB min. / +40 dB typ.
LNA Attenuation	0 to 62 dB (Programmable)
LNA 1 dB Compression (at input to E-O*)	+20 dBm to 2.5 GHz +15 dBm above 2.5 GHz
LNA Third Order Intercept (at input to E-O*) (-40 dBm test signal level at input to sensor)	+30 dBm to 2.5 GHz +25 dBm above 2.5 GHz
LNA Second Order Intercept (at input to E-O*) (-40 dBm test signal level at input to sensor)	+45 dBm to 2.5 GHz +35 dBm above 2.5 GHz
LNA Noise Figure: (AIB RF Input to E-O Input) (Pre-Selector in Bypass)	15 dB max., 6 dB typ.

Made in the USA