



AIC485

DATA SHEET

The AIC485 allows you to install a close or long-range, non-line-of-sight, point-to-multipoint, wireless RS485 network, at a fraction of the cost of installation labor, conduit and cable. The AIC485 is plug-and-play requiring no special programming tools or network management software.

Features

- 902–928 MHz frequency provides excellent non-line-of-sight performance to penetrate foliage, building walls, and floors
- Highest Quality of Service (QoS) available—synchronous point-to-multipoint protocol enables extremely low data latency and jitter
- 128 bit encrypted payload protection provides secure data delivery
- Simple plug-and-play setup with minimal configuration required
- Flexible input power, 12-24 VAC/DC

Technical Specifications

RF transmission rate	1.536 Mb/s
Ethernet throughput	935 Kb/s
Output power	+21 dBm (4 Watts EIRP used with 15 dBi antennae)
Receive sensitivity	-97 dBm at 10e-4 BER (-112 dBm with 15 dBi antennae)
Radio link budget	148 dB with 15 dBi antenna
Range	50 miles LOS with 15 dBi antenna
Radio channels/bandwidth	12 non-overlapping with 2.0833 MHz spacing and 1.75 MHz occupied bandwidth
Automatic frequency select	Yes, radio channel automatically selected and adaptively optimized
Connector types	RF RPSMA Female/Ethernet RJ45 10BaseT
Status LEDs	Power, Ethernet Link, RF RX, RF TX, 4/Channel, and 6/Link Quality
Error correction technique	Sub-block error detection and retransmission
Regulator type	Switching regulator
Power consumption	Transmit: 1.4 W Receive: 0.8 W
Voltage	12-26 VAC/DC
Temperature range	-40° F to 158° F (-40° C to 70° C)
Transmit current draw	250 mA at 5 VDC 110 mA at 12 VDC
Size	1.75" x 4" x 4.3" (44mm x 101.6 mm x 109.2 mm)
Weight	Approximately .6 lbs.

Whether the need is for a single set point on an existing building automation system or multiple control panels, AIC Wireless has the solution. By simply connecting a “server” unit on your existing control system, you now have the ability to pull in points from remote locations by adding “client” radios to field devices. Whether the need is only a few hundred feet or several miles away, AIC Wireless products can fill the gap.