DATARADIO®

TRUSTED WIRELESS DATA

PRIVATE WIRELESS IP GATEWAY

LONG RANGE IP NETWORK CONNECTIVITY OVER SCADA AND TELEMETRY SYSTEMS

Our new Dataradio Private Wireless IP Gateway optimizes IP communications for transmission over your narrowband radio frequency. The optimized connectivity allows you to pass your critical SCADA information over an Ethernet connection back to your IP-based network. Each Private Wireless IP Gateway comes with the built-in flexibility of two distinct modes of operation:

Quick "out of the box" deployment Bridge mode requires virtually no setup and gives the user a transparent Ethernet/IP link to remote locations. Just program your radio frequencies and you're ready to go.

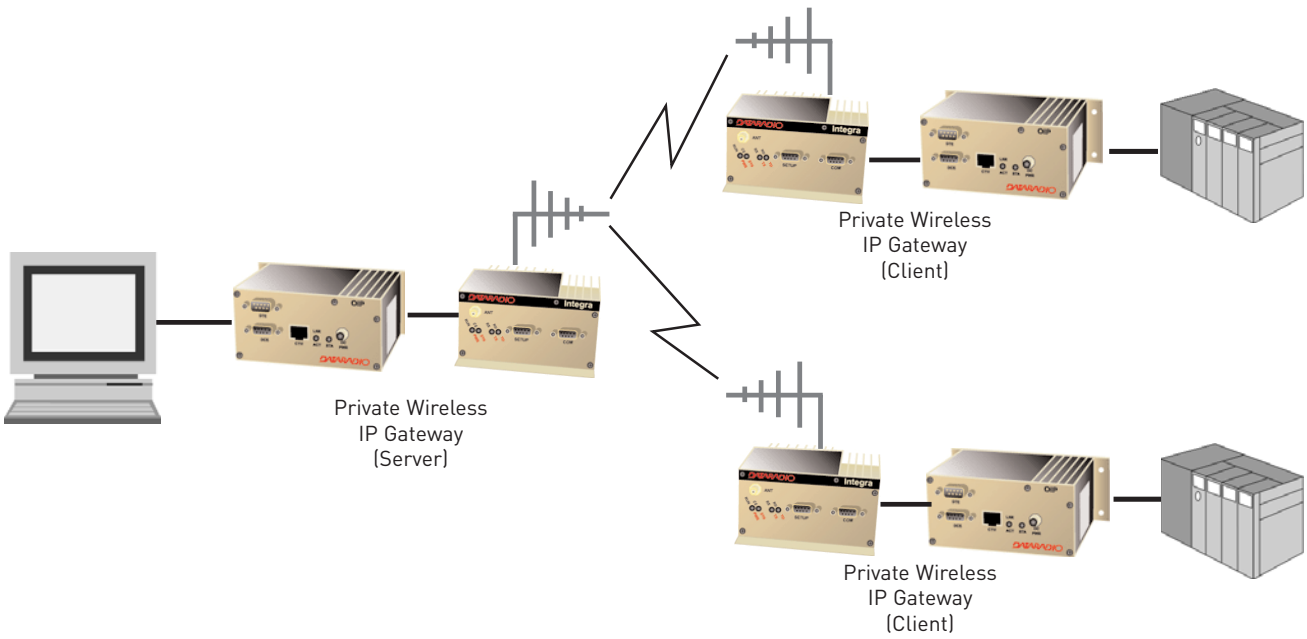
Designed to work much like a standard network router Router mode gives you the flexibility to statically route to different devices within your SCADA network so you can take advantage of the store and forward operation that is inherent in Ethernet products and enhance your network design.

Longer range than a traditional spread spectrum link, the longer link means fewer components are required to complete your network design. Fewer components mean a lower total system cost.

Industry-leading built-in on-line diagnostics By utilizing the Integra platform, the Private Wireless IP Gateway allows you to monitor and maintain the health of your wireless link without taking your system off-line.

The Private Wireless IP Gateway can forward any protocol running IPv4 including TCP, UDP, and ICMP and provides MAC layer bridging as well as HTTP and ARP static routing for packet forwarding.

The Private Wireless IP Gateway is backed by our unmatched **two-year warranty.**



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PRIVATE WIRELESS IP GATEWAY SPECIFICATIONS

GENERAL

Configurations	Transparent Bridge or Router
Modulation	DRCMSK

RADIO	VHF	UHF
Channel Bandwidth	12.5 or 25 kHz	12.5 or 25 kHz
Data Rate	4800, 9600 bps	4800, 9600, 19200 bps
Tx Attack Time	<7ms	
Bit Error Rate ($1x10^{-6}$)	12.5 kHz -@ .35 µV (9600 bps) or 25 kHz - @1.4 µV (9600 bps)	
RF Output Power	1-5 watts programmable	
Duty Cycle	50% @ 5 watts, 30 seconds max transmit - extended transmit with cooling fan	
Transmit Operation	Continuous (no tuning required)	
Operating Mode	Simplex or half-duplex	
Current Drain		
Transmit @ 13.3 VDC	<2.6 A	
Receive @ 13.3 VDC	<220 mA (with terminal connected to the COM port)	
Frequency Tolerance	2.5 ppm	1.5 ppm

ENVIRONMENTAL

Operating Voltage	10 - 16 VDC
Operating Temperature	-30^0 C to + 60^0 C
Dimensions (W x H x D)	OIP - 4.5" x 2.4" x 3.3" (11.4cm x 5.6cm x 8.37cm) OIP/Integra - 4.5" x 2.4" x 4.75" (11.4cm x 5.6cm x 12.1cm)
Shipping Weight	3.2 lbs.

PHYSICAL INTERFACE

Ethernet	10 Base T, RJ-45
Serial	
DTE (Interface to Integra)	RS-232/V2.4 19200 bps
DCE (Setup)	RS-232/V2.4 1200-19200 bps
Antenna	SMA connector (female)

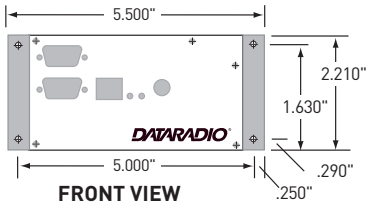
AGENCY APPROVALS

FCC[1]	FCC Rule Part 90 and Part 15
IC	RSS-119, Issue 5
ETSI (CE Mark)[2] (UHF) Models: 450-470 MHz)	Directive 1999/5/EC, Article 10(5) and Annex IV (CE01220) 300.113
CSA[3]	Class 2258 02 Process Control Equipment - For Hazardous Locations (CL1, Div 2, Groups A B C and D)
FM[3]	CL1, Div 2, Groups A B C and D

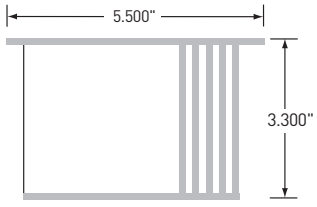
1 380-403 MHz frequency band is not FCC or IC type approved.
2 CE approval is limited to 4800 bps in a 12.5 kHz channel.
3 Approval applies to Integra unit only (OIP unit pending).

SYSTEM COMPONENTS

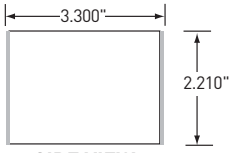
Optimized Internet Protocol (OIP) Router Mechanical Layout



FRONT VIEW

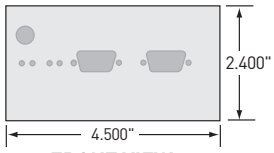


TOP VIEW



SIDE VIEW

Integra Mechanical Layout



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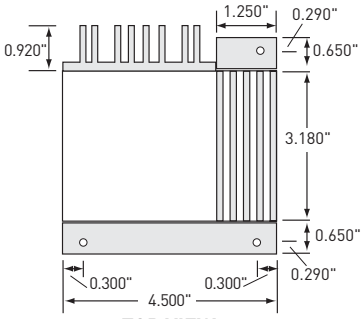

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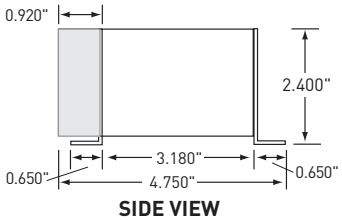

SIDE VIEW

000-0000-040 9/03 Printed in USA