



Innovative **Technology**  
for a **Connected** World

# 2.4 GHz Wireless Serial Product CL2510



## THE FASTEST WAY TO WIRELESS

Based on Laird Technologies' fifth generation 2.4GHz FHSS module, the LT2510, the CL2510 product sets the standard for industrial RF communication. Available with a RS-232 DB-9 connector and housed in a rugged enclosure, the CL2510 is an ideal choice for wireless serial communications in industrial applications. As a wireless serial bridge the CL2510 can replace thousands of feet of cable.

Optimized for point-to-point or point-to-multipoint networks and embedded with Laird Technologies' robust server-client protocol, the CL2510 permits an unlimited number of clients to synchronize to a single server for low latency communications. The server and all clients in a network can communicate with any radio in range via either addressed or broadcast packets. A simple to use Windows Configuration Utility allows customers to easily configure and test the transceivers.

With its field-proven FHSS air interface protocol, the CL2510 rejects RF noise, excels in multipath scenarios, allows for co-located systems, and provides an extremely reliable communication link. It also provides a more robust, but simpler, link than ZigBee for RF applications that do not require a mesh topology.

With a throughput of up to 280 Kb/s, CL2510 delivers speedy data rates. In addition, variable output power options (up to +17 dBm) enable communication over distances that aren't achievable with competing technologies. The radio sustains a standard asynchronous serial data stream between two or more radios out of the box.

## FEATURES

### Easy to Use

- Standard Male DB-9 DCE serial interface
- Standard baud rates supported from 1200 to 230,400 bps
- RF Data rates of 280kbps or 500kbps, selectable
- Advanced configuration using AT Commands

### Networking and Security

- Retries and Acknowledgements
- API Commands for advanced packet addressing
- Frequency Hopping Spread Spectrum for security and interference rejection
- Customizable RF Channel, System ID and Vendor ID
- Automatic Link Synchronization
- Low Latency and high throughput

**global solutions: local support™**

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### SPECIFICATIONS

Parameter	
<b>Interfaces</b>	
Serial Interface Connector	DB-9 Male (RS-232 DCE)
RF Connector	RP-SMA Jack
Power Connector	Center Positive 2.5mm Jack.
<b>Operational</b>	
Network Topologies	Point to Point, Point to multipoint
Security	One byte System ID, two byte Vendor ID
Number of Hopping Channels	43 or 79, user selectable
Frequency Band	2400 MHz to 2471 MHz
RF Data Rate	280kbps or 500kbps, user selectable
RF Technology	Frequency Hopping Spread Spectrum
Output Power	50mW conducted
Maximum radiated power (EIRP)	100mW (CE), or 316mW (FCC) depending on antenna and country of use
Range (Line of Sight with 2.5dBi antenna)	Outdoor: 1.5miles (2.4km) Indoor: 790ft (240m)
Sensitivity	-98dBm at 280kbps RF Rate -94dBm at 500kbps RF Rate
<b>Electrical/Environmental</b>	
Supply Voltage	+6V to 30V DC
Max Power	300mW
Temperature (Operating)	-40C to 80C
Temperature (Storage)	-50C to 85C
<b>Physical</b>	
Dimensions	4.4 x 2.7 x 1.4 inches (11.18 x 6.86 x 3.56 cm)
Weight	6 oz (170g)
<b>Certifications</b>	
FCC	Yes- FCC ID: KQL-CL2510
IC	Yes: IC ID: 2268C-CL2510
CE	Yes: EN300 328-2 V1.71, EN301 489
RoHS	Yes

### ORDERING INFORMATION

CL2510-100-232	2.4GHz ConnexLink 100mW RS232 Serial Transceiver
CL2510-100-232-SP	2.4GHz ConnexLink 100mW RS232 Starter Pack includes 2 units

LWS-DS-CL2510 0810

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