

# CF10G

## 802.11g Compact Flash Module with Antenna Connectors



### INDUSTRIAL WI-FI WITH WORLD CLASS SOFTWARE.

The CF10G compact flash (CF) radio module from Laird combines a high-performance 802.11g radio with customized software, both proven on mobile computers and other business-critical mobile devices that operate in harsh environments. No other Wi-Fi® radio module can match the range, robust security, seamless mobility, and easy administration of the CF10G module.

The CF10G module delivers **superior hardware**, with a maximal radio range, minimal power consumption, and broad operating temperature range. **Laird software** guarantees enterprise-level security, fast and reliable roaming, and easy administration. And all Laird Wi-Fi radios carry **certifications and approvals** that you may use to expedite your design to market.

#### SUPERIOR HARDWARE BRINGS CONNECTIVITY ANYWHERE



The CF10G Module is designed for business-critical mobile devices and challenging radio environments, with **significantly greater performance and range** than Wi-Fi designed for office / consumer applications. **802.11g protocol** coexists with legacy networks, boosting throughput to 54 Mbit/s. Dual Hirose U.FL antenna connectors enable **Tx / Rx Diversity** for error correction, creating more robust connections in tough environments. And Laird's quality manufacturing enables extended **operating temperatures from -30°C to +75°C**, far exceeding the range of most radio modules.

#### ENTERPRISE-GRADE SECURITY AND DEVICE MANAGEMENT



Laird software leverages our hardware's unique strengths for the greatest possible connectivity, security, and strength. Laird's drivers, supplicant, and fully featured Laird Connection Manager enable **802.1X support for WPA2 Enterprise security** and a **broad range of EAP types**. The CF10G operates on **Windows Embedded and Windows Mobile**. Laird software also enables the **fastest roaming in the industry** for constant connection and standalone manufacturing and regulatory applications to help **rapidly deploy your device to market**.

#### PERSONAL SUPPORT FROM DESIGN TO MANUFACTURE.



Laird's support team is always standing by to provide integration support, analysis, and troubleshooting for all currently supported hardware. Working in the same offices as Laird engineering, Embedded Wireless Support is your personal bridge to all of Laird's software, experience, and expertise. Laird guarantees a fast response and is **dedicated to seeing your product through design to manufacturing**. And our online support center serves as an archive of many common questions, as well as **hundreds of support documents and software files**.

### Features at a Glance

- **Unparalleled connectivity** provided by antenna diversity, market-leading transmit and receive power control, and intelligent error-correction mechanisms
- **Enterprise security** with 802.1X support (WPA2 Enterprise) and a broad variety of EAP types for authentication
- **Certifications and approvals** to speed your device to market, leveraging Laird's testing and regulatory efforts.

### Application Areas



Connected Hospital / Medical Devices



Cable Replacement



Industrial / AIDC

## SPECIFICATIONS

Category	Feature	Specification
Interfaces	System Interface	16-bit Compact Flash Type I with 50-pin connector
	Antenna interface	Two U.FL (Hirose) connectors for antenna diversity
Chipset		Broadcom BCM4318E
Power	Input Power	3.3 VDC +/- 5%
	Power Consumption (at max. transmit power setting)	Transmit: 400 mA (1320mW) Receive: 180 mA (594mW) Standby: 10 mA (33 mW)
	Operating Temperature	-22° to 167°F (-30° to 75°C)
Environmental	Operating Humidity	10 to 90% (non-condensing)
	Length x Width x Thickness	2.15" (54.5 mm) x 1.69" (43 mm) x 0.13" (3.3 mm)
Physical	Weight	0.5 oz (15 g)
	Mounting	50-pin connector Through hole: non-metallic screw recommended
	Network Standards	IEEE 802.11b, 802.11g, 802.11i
Wi-Fi	Network Architecture Types	Infrastructure and ad hoc
	Frequency Band	2.4 to 2.4897 GHz
	Wireless Media	Direct Sequence-Spread Spectrum (DSSS) Orthogonal Frequency Divisional Multiplexing (OFDM)
Security	Media Access Protocol Standards	Carrier sense multiple access with collision avoidance (CSMA/CA) WEP, WPA, WPA2
	Encryption	Wireless Equivalent Privacy (WEP, RC4 Algorithm) Temporal Key Integrity Protocol (TKIP, RC4 Algorithm) Advanced Encryption Standard (AES, Rijndael Algorithm)
	Encryption Key Provisioning	Static (40-bit and 128-bit lengths), Pre-Shared (PSK), Dynamic
	802.1X Extensible Auth. Types	EAP-FAST, EAP-TLS, EAP-TTLS, PEAP-GTC, PEAP-MSCHAPv2, PEAP-TLS, LEAP
	Operating Systems Supported	Windows Mobile 6.5, 6.1, 6.0, 5.0, and (Pocket PC) 2003 Windows Embedded CE 6.0 (all versions) and 5.0 Windows XP Professional and Embedded
Regulatory	Domain Support	FCC, ETSI, TELEC
	Certifications	<b>Wi-Fi Alliance</b> 802.11b, 802.11g WPA Enterprise WPA2 Enterprise <b>Cisco Compatible Extensions (CCX)</b> Version 4
Warranty		<b>Limited Lifetime</b>

