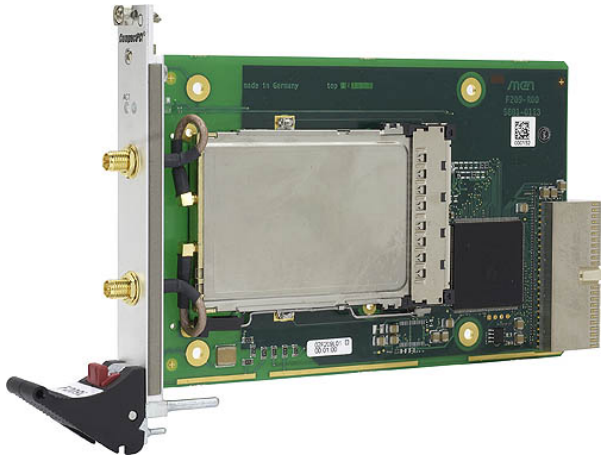


F209L - 3U CompactPCI® WLAN Interface



- **4 HP 32-bit/33-MHz CompactPCI®**
- **IEEE 802.11b**
- **Outdoor range up to 600 m**
- **Up to 11 Mbits/s per channel**
- **Output power 20 dBm**
- **Frequency band 2.4 GHz (DSSS)**
- **40-bit or 128-bit WEP encryption**
- **2 Reverse SMA antenna connectors**
- **-40 to +85°C screened**

The F209L is a rugged single Eurocard CompactPCI® WLAN interface based on a PCMCIA card and needing only one slot on the CompactPCI® bus. It features access safety and offers two rugged antenna connectors at the front panel for the use of external antennas with a radius of up to 600 meters. The WLAN IEEE 802.11b standard translates into a data rate of up to 11 Mbits/s per channel, an output power of 20 dBm and a 40-bit or 128-bit WEP encryption. The frequency band width is 2.4 GHz with Direct Sequence

Spread Spectrum (DSSS). The F209L supports auto fall-back. The WLAN interface is a high-power, high-sensitivity solution that maintains communication in problematic environments.

The F209L is screened for -40 to +85°C operation temperature and prepared for conformal coating in order to be used also in harsh and mobile environments.

Technical Data

WLAN Interface

- IEEE 802.11b compliant
- Prism 2.5 chipset
- 40-bit or 128-bit WEP encryption, MAC filter and Access control
- Data rate up to 11Mbps/s per channel, auto fall-back
- Frequency band width 2.4GHz with Direct Sequence Spread Spectrum (DSSS)
- Outdoor range up to 600m
- Two antenna connectors at front panel
 - For the use of external antennas
 - Rugged screw connection
- Output power: 20 dBm (100 mW) typ.
- Receiver sensitivity:
 - -91 dBm @ 11Mbps/s
 - -92 dBm @ 5.5Mbps/s
 - -93 dBm @ 2Mbps/s
 - -95 dBm @ 1Mbit/s
- Supported modulations: CCK (11Mbps/s, 5.5Mbps/s), DQPSK (2Mbps/s), DBPSK (1Mbit/s)
- One activity LED
- Implemented through onboard PC Card
 - Allows easy configuration of IEEE standard through different PC Cards
 - IEEE 802.11a, IEEE 802.11b, or IEEE 802.11g

Front Connections

- Two Reverse SMA antenna connectors

CompactPCI® Bus

- Compliance with CompactPCI® Core Specification PICMG 2.0 R3.0
- Peripheral slot
- 32-bit/33-MHz PCI-to-PCI bridge
- V(I/O): +3.3V (+5V tolerant)

Electrical Specifications

- Supply voltage/power consumption:
 - +5V (-3%/+5%), transmit operation: 400mA max., receive operation: 300mA max., sleep mode: 50mA max.
 - +3.3V (-3%/+5%), 50mA max.
- MTBF (without WLAN PC card): 3,560,811h @ 40°C according to IEC/TR 62380 (RDF 2000)

Mechanical Specifications

- Dimensions: conforming to CompactPCI® specification for 3U boards
- Front panel: 4HP with ejector
- Weight: 180g

Environmental Specifications

- Temperature range (operation):
 - -40..+85°C (screened)
 - Airflow: min. 10m³/h
- Temperature range (storage): -40..+85°C
- Relative humidity (operation): max. 95% non-condensing
- Relative humidity (storage): max. 95% non-condensing
- Altitude: -300m to + 3,000m
- Shock: 15g/11ms
- Bump: 10g/16ms
- Vibration (sinusoidal): 2g/10..150Hz
- Conformal coating on request

Safety

- PCB manufactured with a flammability rating of 94V-0 by UL recognized manufacturers

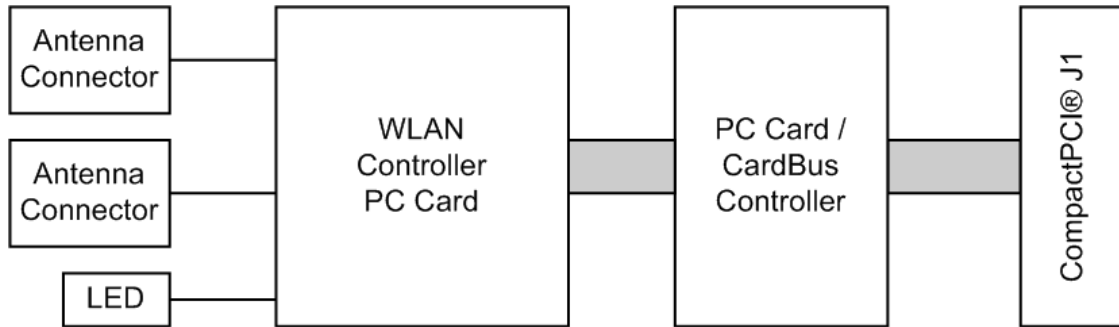
EMC

- Tested according to EN 55022 (radio disturbance), IEC1000-4-2 (ESD) and IEC1000-4-4 (burst)

Software Support

- Driver software for Windows® and Linux
- For more information on supported Windows® operating system versions and drivers see Software.

Diagram



Configuration & Options

Standard Configurations

Article No.	WLAN Type	Front Panel	Operation Temperature
02F209L00	IEEE 802.11b	4HP	-40..+85°C

Options

Interface

- Capabilities variable through use of different PC Card
 - WLAN
 - ZigBee
 - Bluetooth
 - GPS
 - GSM
- Variable WLAN output power
 - Up to 25.5 dBm (370 mW) for higher outdoor range
 - The allowed output power must be verified for each country and may need official permission
- For applications that require high access safety.

Please note that some of these options may only be available for large volumes. Please ask our sales staff for more information.

Ordering Information

Standard Hardware

02F209L00 WLAN interface IEEE 802.11b, 2 reverse SMA antenna connectors, -40..+85°C screened, including PC Card antenna

Documentation

20F209L00 F209L User Manual

For the most up-to-date ordering information and direct links to other data sheets and downloads, see the F209L online data sheet under » www.men.de.

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