



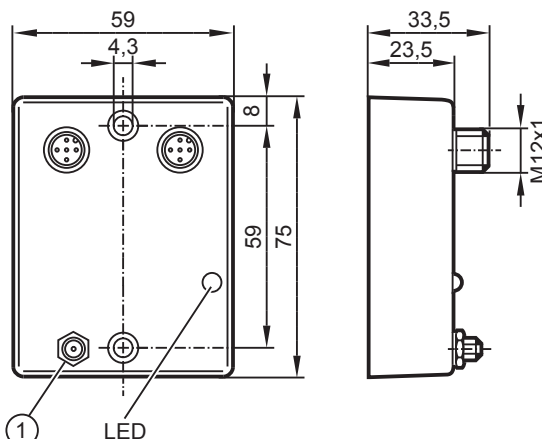
CR3131

CANwireless
für den Anschluss einer
externen Antenne

CAN-WLAN-/Bluetooth-
Schnittstelle

WLAN-Frequenzbänder
2,4 GHz und 5 GHz

8...32 V DC



1: RP-SMA-Buchse



Technische Daten

Elektrische Daten

Betriebsspannung U_B

Stromaufnahme

Status-LED

CAN-Schnittstelle

Profil

Protokoll

CAN Empfangspuffer

CAN zu Wireless Puffergröße

WLAN

Frequenzband

Protokoll

Sicherheitsstandard

Reichweite ¹⁾

Max. Ausgangsleistung

Funktionen

Übertragungsgeschwindigkeit ²⁾

Durchschnittliche Latenzzeit ³⁾

Bluetooth

Standard

Profil

Reichweite ¹⁾

Max. Ausgangsleistung

Funktionen

Übertragungsgeschwindigkeit ²⁾

Durchschnittliche Latenzzeit ³⁾

8...32 V DC

≤ 60 mA (bei 24 V DC)

1 x 2-farbig (rot / grün)

CAN Interface 2.0 A/B, ISO 11898-2

CANopen, CAN Layer 2, J1939

2048 Nachrichten

2048 Nachrichten

2,4 / 5 GHz

IEEE 802.11 a/b/g/n, IEEE 802.11 d/e/i/h

WPA2-PSK, WPA-PSK, WEP64, WEP128, LEAP, PEAP

≤ 200 m

18 dBm (63 mW)

WLAN-Bridge (Infrastructure Modus)
WLAN-Interface (Infrastructure Modus oder Mini Access Point Modus)

1600 CAN-Nachrichten pro Sekunde

≤ 20 ms (WLAN-Bridge)

Bluetooth Classic (2.1 + EDR)

SPP (Serial Port Profile)

≤ 100 m

14 dBm (25 mW)

Bluetooth-Bridge
Bluetooth-Interface

4000 CAN-Nachrichten pro Sekunde

≤ 20 ms (Bluetooth-Bridge)


CR3131
Software

Gerätekfiguration

Hinweis

Mechanische Daten

Umgebungstemperatur

Schutzart

Gehäusematerial

Gewicht

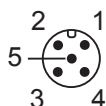
Prüfnormen und Bestimmungen

CE

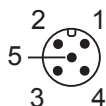
E1

FCC

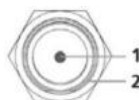
Anschlussbelegung

CAN / Versorgung
M12-Stecker, 5-polig


1	GND	Ground
2	U _B	Versorgung
3	nicht belegt	nicht belegt
4	CAN_H	CAN-Schnittstelle (High)
5	CAN_L	CAN-Schnittstelle (Low)

RS-232
M12-Stecker, 5-polig


1	GND	Ground
2	nicht belegt	nicht belegt
3	DSR	Data Set Ready (Boot)
4	RxD	RS-232 Receive (Eingang)
5	TxD	RS-232 Transmit (Ausgang)

WLAN-Antenne
RP-SMA-Buchse ¹⁾


1	Signal	WLAN / Bluetooth
2	GND	Ground

Hinweise

¹⁾ mit / für Antenne Art.-Nr. EC2118

²⁾ bei CAN-Nachrichten und 1 MBit/s

³⁾ bei Übertragung einer einzelnen CAN-Nachricht

Technische Daten

ifm Maintenance Tool oder CODESYS mit EDS-Datei

weitere Informationen siehe www.ifm.com → CR3131

-30...75° C

IP 65

Polyamid (schwarz)

0,065 kg

EN 60950-1
EN 301489-1 V1.9.2
EN 301489-17 V2.2.1
EN 61000-6-2
EN 61000-6-3
EN 300328 V1.9.1
EN 301893 V1.8.1

UN/ECE-R10

FCC Part 15/47 CFR Conducted Limits
FCC Part 15/47 CFR Radiated Emission Limits
regarding Part 15 of the FCC rules (Class B digital devices)



CR3131

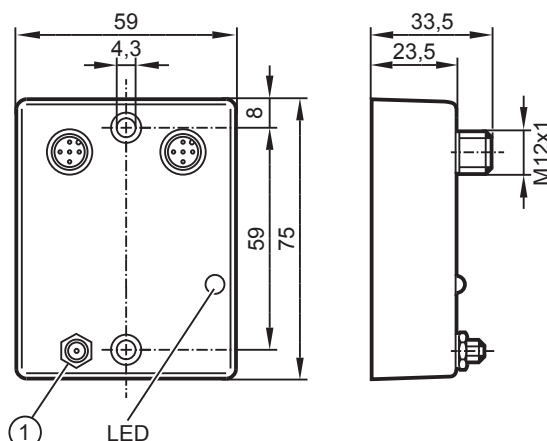
CANwireless
for connection to an
external antenna

CAN Wi-Fi/Bluetooth
interface

Wi-Fi frequency bands
2.4 GHz and 5 GHz

8...32 V DC

CE



1: RP-SMA socket

E1

Technical data

Electrical data

Operating voltage U_B

8...32 V DC

Current consumption

≤ 60 mA (at 24 V DC)

Status LED

1 x 2 colours (red / green)

CAN interface

Profile

CAN interface 2.0 A/B, ISO 11898

Protocol

CANopen, CAN Layer 2, J1939

CAN receive buffer

2048 messages

CAN to Wi-Fi buffer size

2048 messages

Wi-Fi

Frequency band

2.4 / 5 GHz

Protocol

IEEE 802.11 a/b/g/n, IEEE 802.11 d/e/i/h

Safety standard

WPA2-PSK, WPA-PSK, WEP64, WEP128, LEAP, PEAP

Range ¹⁾

≤ 200 m

Max. output power

18 dBm (63 mW)

Functions

Wi-Fi bridge (infrastructure mode)
Wi-Fi interface (infrastructure mode or mini access point mode)

Transmission rate ²⁾

1600 CAN messages per second

Average latency time ³⁾

≤ 20 ms (Wi-Fi bridge)

Bluetooth

Standard

Bluetooth Classic (2.1 + EDR)

Profile

SPP (serial port profile)

Range ¹⁾

≤ 100 m

Max. output power

14 dBm (25 mW)

Functions

Bluetooth bridge
Bluetooth interface

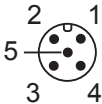
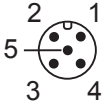
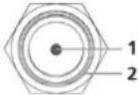
Transmission rate ²⁾

4000 CAN messages per second

Average latency time ³⁾

≤ 20 ms (Bluetooth bridge)



CR3131	Technical data																	
Software																		
Device configuration	ifm maintenance tool or CODESYS with EDS file																	
Remark	For more information see www.ifm.com → CR3131																	
Mechanical data																		
Ambient temperature	-30...75 °C																	
Protection rating	IP 65																	
Housing material	polyamide (black)																	
Weight	0.065 kg																	
Test standards and regulations																		
CE	EN 60950-1 EN 301489-1 V1.9.2 EN 301489-17 V2.2.1 EN 61000-6-2 EN 61000-6-3 EN 300328 V1.9.1 EN 301893 V1.8.1																	
E1	UN/ECE-R10																	
FCC	FCC Part 15/47 CFR Conducted Limits FCC Part 15/47 CFR Radiated Emission Limits regarding Part 15 of the FCC rules (Class B digital devices)																	
Wiring																		
CAN / supply M12 connector, 5 poles		<table><tr><td>1</td><td>GND</td><td>Ground</td></tr><tr><td>2</td><td>U_B</td><td>Supply</td></tr><tr><td>3</td><td>Not connected</td><td>Not connected</td></tr><tr><td>4</td><td>CAN_H</td><td>CAN interface (high)</td></tr><tr><td>5</td><td>CAN_L</td><td>CAN interface (low)</td></tr></table>	1	GND	Ground	2	U _B	Supply	3	Not connected	Not connected	4	CAN_H	CAN interface (high)	5	CAN_L	CAN interface (low)	
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Wi-Fi antenna RP-SMA socket ¹⁾		<table><tr><td>1</td><td>Signal</td><td>Wi-Fi / Bluetooth</td></tr><tr><td>2</td><td>GND</td><td>Ground</td></tr></table>	1	Signal	Wi-Fi / Bluetooth	2	GND	Ground										
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Remarks	¹⁾ with / for antenna article no. EC2118																	
	²⁾ for CAN messages and 1 MBit/s																	
	³⁾ for transmission of a single CAN message																	

CR3131

CANwireless
pour le raccordement
d'une antenne externe

Interface
CAN Wi-Fi/Bluetooth

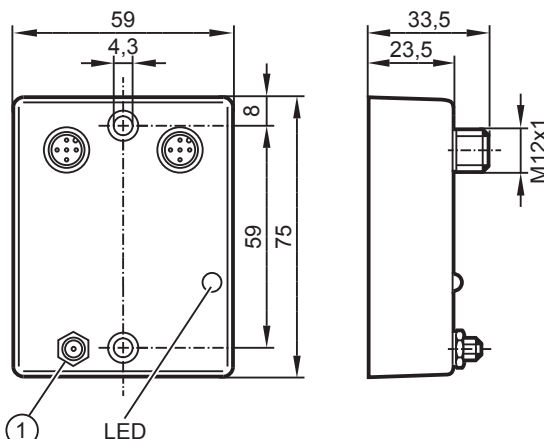
Bandes de fréquences
Wi-Fi

2,4 GHz et 5 GHz

8...32 V DC

CE

E1



1: Prise RP-SMA

Données techniques

Données électriques

Tension d'alimentation UB

Consommation

LED d'état

Interface CAN

Profil

Protocole

Tampon de réception CAN

Tampon de réception CAN à
Wireless

Wi-Fi

Bande de fréquences

Protocole

Standard de sécurité

Portée ¹⁾

Puissance sortie max.

Fonctions

Débit de transmission ²⁾

Temps de latence moyen ³⁾

Bluetooth

Standard

Profil

Portée ¹⁾

Puissance sortie max.

Fonctions

Débit de transmission ²⁾

Temps de latence moyen ³⁾

8...32 V DC

≤ 60 mA (à 24 V DC)

1 x 2 couleurs (rouge / verte)

Interface CAN 2.0 A/B, ISO 11898-2

CANopen, CAN Layer 2, J1939

2048 messages

2048 messages

2,4 / 5 GHz

IEEE 802.11 a/b/g/n, IEEE 802.11 d/e/i/h

WPA2-PSK, WPA-PSK, WEP64, WEP128, LEAP, PEAP

≤ 200 m

18 dBm (63 mW)

Pont Wi-Fi (mode "Infrastructure")
Interface Wi-Fi (mode "Infrastructure" ou mode "Mini Access Point")

1600 messages CAN par seconde

≤ 20 ms (pont Wi-Fi)

Bluetooth Classic (2.1 + EDR)

SPP (Serial Port Profile)

≤ 100 m

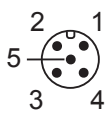
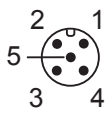
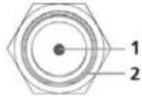
14 dBm (25 mW)

Pont Bluetooth
Interface Bluetooth

4000 messages CAN par seconde

≤ 20 ms (pont Bluetooth)



CR3131	Données techniques																	
Logiciel																		
Configuration appareil	ifm Maintenance Tool ou CODESYS avec fichier EDS																	
Remarque	Plus d'informations sont disponibles sous www.ifm.com → CR3131																	
Données mécaniques																		
Température ambiante	-30...75° C																	
Indice de protection	IP 65																	
Matière boîtier	polyamide (noir)																	
Poids	0,065 kg																	
Normes d'essai et réglementations																		
CE	EN 60950-1 EN 301489-1 V1.9.2 EN 301489-17 V2.2.1 EN 61000-6-2 EN 61000-6-3 EN 300328 V1.9.1 EN 301893 V1.8.1																	
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Schéma de branchement																		
CAN / alimentation connecteur M12, 5 pôles		<table><tr><td>1</td><td>GND</td><td>terre</td></tr><tr><td>2</td><td>UB</td><td>alimentation</td></tr><tr><td>3</td><td>non utilisée</td><td>non utilisée</td></tr><tr><td>4</td><td>CAN_H</td><td>interface CAN (haut)</td></tr><tr><td>5</td><td>CAN_L</td><td>interface CAN (bas)</td></tr></table>	1	GND	terre	2	UB	alimentation	3	non utilisée	non utilisée	4	CAN_H	interface CAN (haut)	5	CAN_L	interface CAN (bas)	
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Antenne Wi-Fi Prise RP-SMA ¹⁾		<table><tr><td>1</td><td>Signal</td><td>Wi-Fi / Bluetooth</td></tr><tr><td>2</td><td>GND</td><td>terre</td></tr></table>	1	Signal	Wi-Fi / Bluetooth	2	GND	terre										
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Remarques	¹⁾ avec / pour antenne référence EC2118																	
²⁾ pour messages CAN et 1 MBit/s																		
³⁾ pour la transmission d'une seule message CAN																		