

**Data Sheet** 

# **PLUS+1**® CS10 Wireless Gateway

The Danfoss PLUS+1® CS10 Wireless Gateway is engineered by security experts and designed for the harsh environments common with Off-Highway equipment. The CS10 is a rugged and secure wireless device for machine monitoring – locally or remotely.

CS10 Wireless Gateway enables a CAN system with Wi-Fi and Bluetooth connectivity to a smart mobile application for diagnosis and updates. Connect any two CAN systems by adding a second CS10 to support the CAN Bridging functionality. In addition, the CS10 is a wireless replacement for wired connection interfaces like the CG150.

Secure data encryption and a flexible device API further enhance reliability and integration with existing applications.



# **Features**

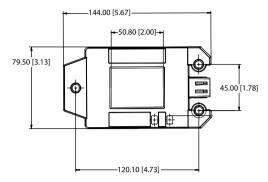
- Wi-Fi Access point and Client
- Bluetooth 4.2 with DLE
- Bluetooth LE peripheral (usable with Client Library API)
- CAN Flexible baud rate (50,100,125,250,500,1000Kbps)
- Supports Internet Protocol v4 and v6
- PLUS+1<sup>®</sup> Mobile Service Tool is the configuration interface for Wi-Fi, Bluetooth, and CAN, as well as firmware updates
- Detect Machine Safe State
- Bridging with any interlink device: CS10to-CS10
- Delay shut off feature to maintain wireless connectivity through key cycle
- J1939 support, KWP2000, UDS
- API Client library
- LE Secure connections with Just Works pairing model
- Brute force attack protection
- Visual indicators for Power, Wi-Fi connectivity, Bluetooth connectivity, CAN connectivity

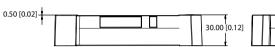
- Plug and perform solution
- Power management driven CL15 including low-power mode with cyclic configurable wake-up
- PLUS+1<sup>®</sup> GUIDE programmable
- IP67 (with connector mated)
- Internal memory allows Data Logging
- ARM Cortex-A7 32-bit 400MHz
- 256MB NAND Flash
- 256MB DDR3L SDRAM

Comprehensive technical literature is online at www.danfoss.com



# CS10 Wireless Gateway dimensions in mm [in]

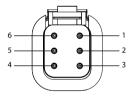




# **Caution**

This device is not field serviceable. Opening the device housing voids the warranty.

#### 6-Pin DTM DEUTSCH connector



# Pin assignments

Pin	Function	Pin	Function
1	Ground	4	CAN Low
2	Power	5	Key Switch
3	CAN High	6	CAN Shield / Pairing

# Interface / protocols / certifications

CAN bus network	ISO 11898-2 High Speed, 2.0A/B	
Wireless module	Wi-Fi / Bluetooth combo	
Antenna	Internal	
Wi-Fi Standards	802.11 a/b/g/n	
Bluetooth Standards	5.0 (BR/EDR & LE)	
Certifications	FCC, IC, CE/RED, E-mark,	
	Australia/New Zealand	
Vibration	IEC 60068-2-64	
Shock	IEC 60068-2-27 Ea	

Use care when wiring mating connector. Pinouts listed are for device pins.

#### Electrical data

Operating input voltage	6V to 36VDC	
Operating input current	60mA typ at 24VDC	
Power consumption	1.5W typ	
Shutdown current	1mA max at 24VDC	
EMI/RFI rating	100V/m	

#### Mechanical data

Dimension LxWxD	144 x 79.5 x 30mm	
Housing	Tamper resistant	
Color	Black	
Operating Temperature	-30C to 70C	
Storage Temperature	-40C to 85C	
IP Rating	IP67 (with connector mated)	
Weight	110g	
Status LEDs	1 red/green, 1 blue/white	

# **Ordering information**

# Product part number

CS10 Wireless Gateway	11242005
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# Related products part numbers

Description	Part number
PLUS+1® GUIDE Professional	11179523
PLUS+1 <sup>®</sup> Service Tool	AQ00000194
PLUS+1 <sup>®</sup> Mobile Service Tool	AQ293083128728

# Mating connector assemblies

Туре	Danfoss ordering number
Connector bag assembly	10101551
Connector with 400mm [15.75 in] wire harness	10101557



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