

Data Sheet

# PLUS+1<sup>®</sup>

## CS10 Wireless Gateway

The Danfoss PLUS+1<sup>®</sup> 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<sup>®</sup> 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.

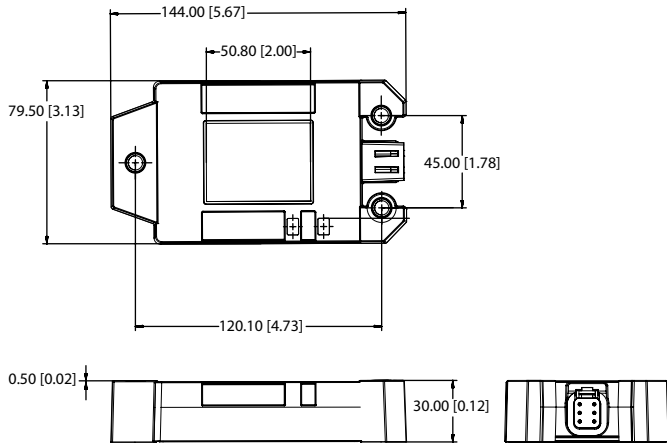


### Features

- 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: CS10-to-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](http://www.danfoss.com)

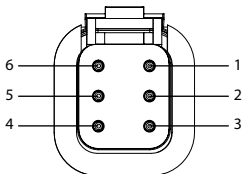
CS10 Wireless Gateway dimensions in mm [in]



**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

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

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

Electrical data

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

Mechanical data

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

Ordering information

Product part number

<b>CS10 Wireless Gateway</b>	11242005
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Related products part numbers

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

Mating connector assemblies

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