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.
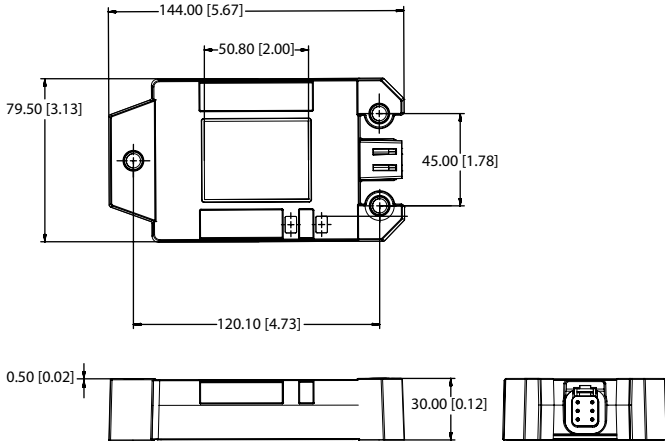
Features

- 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® 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® GUIDE programmable
- IP67 (with connector mated)
- Internal memory allows Data Logging
- ARM Cortex-A7 32-bit 400MHz
- 256MB NAND Flash
- 256MB DDR3L SDRAM

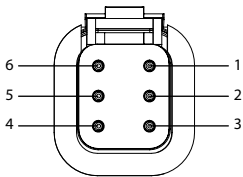Comprehensive technical literature is online at *www.danfoss.com*

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

Related products part numbers

Description	Part number
PLUS+1® GUIDE Professional	11179523
PLUS+1® Service Tool	AQ00000194
PLUS+1® Mobile Service Tool	AQ293083128728

Mating connector assemblies

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