

PLUS+1™ RG 150 Remote Connectivity Gateway

Remote Connection to PLUS+1 Mobile Machine Control Systems

The Sauer-Danfoss RG 150 Remote Connectivity Gateway is an element of the PLUS+1 family of mobile machine management products. The RG 150 allows PLUS+1 Service Tool access to a mobile machine's PLUS+1 control system from locations remote to the machine. The RG 150 provides the same functionality that is available when a laptop running the PLUS+1 Service Tool is directly connected to the machine using the Sauer-Danfoss CG150 CAN/USB Gateway.

Wireless Communication

The RG 150 Remote Connectivity Gateway consists of a wireless Gateway with SIM card and antenna. The Gateway plugs into the machine's CAN communication bus and may be permanently mounted on the machine or used as a temporary diagnostic tool. RG 150 device drivers are embedded in the PLUS+1 Service Tool. A data service plan subscription from Sauer-Danfoss is required.

Remote Machine Control Access

The RG 150 allows remote upload and download of machine application tuning parameters, remote downloads of application software to machine PLUS+1 controllers and displays, and remote access to machine vault memory.



PLUS+1 RG 150 Remote Connectivity Gateway

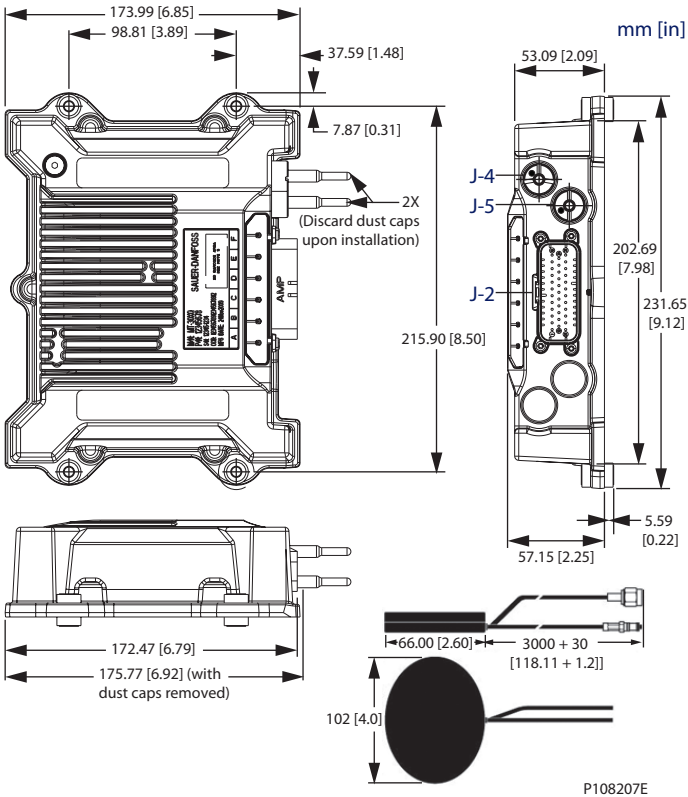
Features

- Remote connectivity package includes remote Gateway, antenna, and secure data service
- Antenna mounting flexibility
- Supports temporary or permanent machine installation
- Seamless integration with PLUS+1 Service Tool
- Interfaces with programmable PLUS+1 compliant hardware to:
 - View checkpoint data
 - Upload and download parameters
 - Reflash applications
 - Read vault memory
- Global Positioning System (GPS) for real time positioning and data stamping
- Global System for Mobile (GSM) wireless communication
- Data service plans
- Supports machine CAN bus bit rates up to 1 MB per second
- IP 67 Gateway ingress protection
- CE compliant

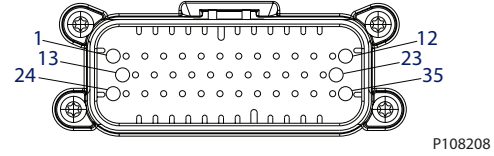
Local Address:

The PLUS+1 Remote Connectivity Gateway requires GSM data connectivity in area(s) the device will be located. As is customary with cellular services, GSM data coverage may be subject to bad cells or unavailability in certain areas. Contact Sauer-Danfoss for a list of current wireless service carriers and their roaming partners.

Dimensions



Tyco™ 1-776163-1, 35 Pin Connector



Connector J-2 Pinout Information

Pin	Controller function	Pin	Controller function
1		19	
2		20	
3		21	
4	CAN low	22	
5	CAN high	23	
6		24	Battery power (+)
7		25	
8		26	
9		27	
10		28	
11		29	
12		30	
13	Battery ground (-)	31	
14		32	
15		33	Enable RG 150*
16		34	Ignition (+)
17		35	Ground sense (-)
18			

* 12 Vdc = Enable; ground/open = disable

Gateway Specifications

Supply voltage	9 to 32 Vdc
Operating temperature range	-40° C to 85° C (-40° F to 185° F)
Storage temperature range	-40° C to 85° C (-40° F to 185° F)
IP rating (with mating connector attached)	IP 67
EMI/RFI rating	EEC EMC Directive 89/336
Weight	1.4 kg (3.1 lbs)
Maximum input current at 12 Vdc	8 A

Antenna Specifications

Operating temperature range	-30° C to +85° C (-22° F to +185° F)	
Storage temperature range	-30° C to +85° C (-22° F to +185° F)	
IP rating	IP 66	
Weight	151 g (5.3 oz)	
GPS frequency range	1.57542 GHz ±1.023 MHz (L1 band)	
Cellular frequency range	AMPS	824 to 894 MHz
	GSM 900	880 to 960 MHz
	GSM 1800	1710 to 1880 MHz
	GSM 1900	1850 to 1990 MHz
	GPRS	Class 10 device
Cable length	3000 mm (118 in)	

Connector J-4, J-5 Information

Connector J-4	Antenna GPS
Connector J-5	Antenna GSM

Use care when wiring mating connector.
Above pinouts are for device pins.

Ordering Information

Gateway**	Part numbers
RC150 NNN NNN GLNN XXX	83013635
RC150 NNN NNN EUNN XXX	83013636
RC150 NNN NNN NANN XXX	83013637
Accessories	Part numbers
RG 150 Cell/GPS Antenna, screw mount	11078056
RG 150 Cell/GPS Antenna, adhesive/magnetic mount	11078058
Mating connector	Part number
RG 150 Gateway Controller mating connector bag assembly	11083231
Related product: PLUS+1 RC 150 Remote Connectivity System**	
Complete package includes: RG 150 controller, antenna, mating connector bag assembly, client access software, and data service plan	

** Reference Literature

Sauer-Danfoss product literature on line at: www.sauer-danfoss.com	Order number
PLUS+1 RC 150 Remote Connectivity System Data Sheet	L1015290
PLUS+1 RC 150 Remote Connectivity System User Manual	L1031218