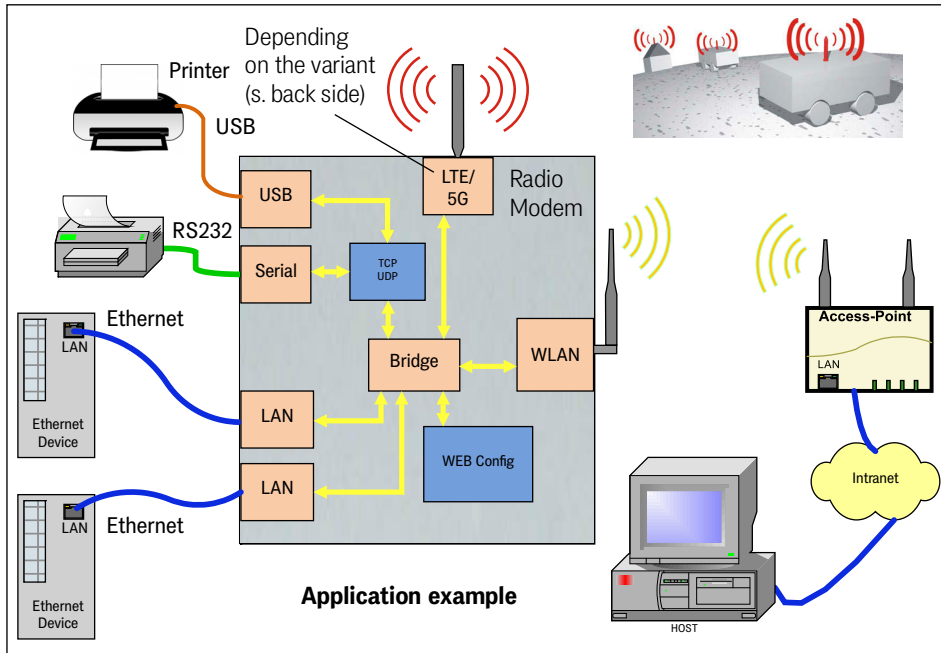


In the picture: Variant HG G-76354ZA 5G

all variants

Description



The radio modem HG G-76354-A connects devices that communicate via Ethernet or serial interfaces with other networks via WLAN, and in the 5G variant also via mobile networks (see table Variant overview on the back). This includes applications with mobile vehicles such as forklifts or AGV.

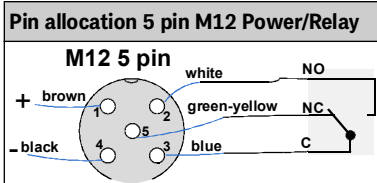
The communication partners can be additional radio modems or computers that communicate via a suitable application. Furthermore, extensions are possible via the USB port, which offer additional serial or I/O interfaces, for example.

Overview

- WLAN client for 802.11a/b/g/n/ac/ax via 2.4 + 5 GHz WLAN WiFi 6, data rate up to 2,402 MBit/s
- Variant 5G: Worldwide 3G/4G/5G in multi-mode, data rates up to 3.3 Gbps download/900 Mbps Upload
- Integrated OpenVPN client
- Bridge modes for connecting LAN clients: NAT / Single Client NAT / Single Client Cloning / Level 2 Bridge / MWLC Mode
- WEP, 802.11i WPA-WPA2-WPA3-AES-TKIP-PSK
- WPA Enterprise 802.1x PEAP LEAP TLS TTLS
- Certificate management for the authentication via 802.1x
- SCEP (Simple Certificate Enrollment Protocol)
- MQTT (Message Queuing Telemetry Transport)
- 2x Gigabit LAN interfaces
- 1x serial interface: RS232, Serial-Client via TCP/UDP
- 1x USB 2.0 interface, also for additional interfaces
- 1x switching relay controllable via network (e.g. to wake up vehicles from sleep mode)
- Voltage supply 10-60V or via PoE (LAN)
- Robust aluminum housing with various mounting options and screwable connectors
- Configuration via the internal web server, REST-API or with the help of the dedicated MC-Config program

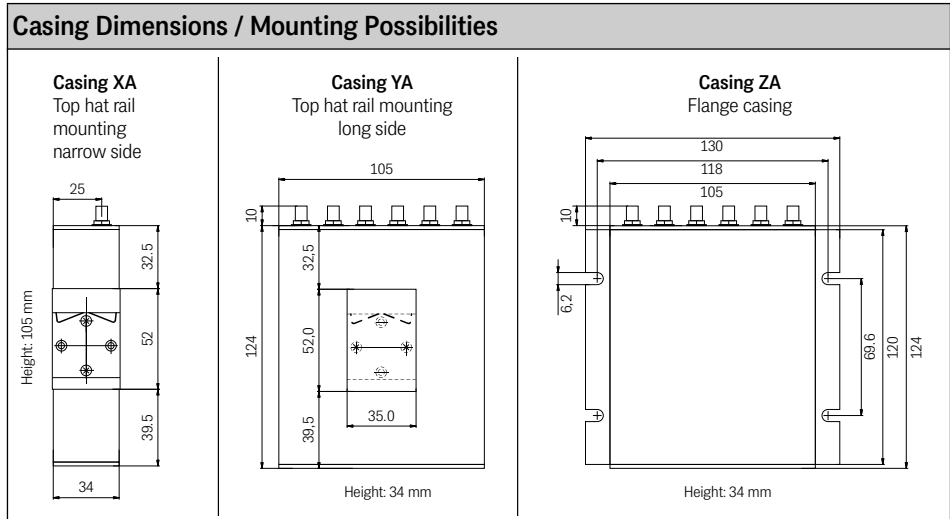
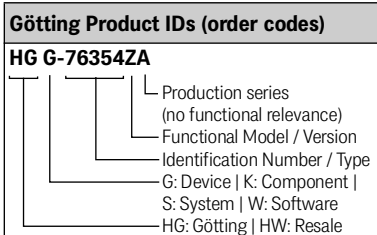
Variants of the radio modem		
Type	Specification	
HG G-76354...	XA	Top hat rail mounting narrow side
	XA 5G	Casing like XA with option 5G
	YA	Top hat rail mounting long side
	YA 5G	Casing like YA with option 5G
	ZA	Flange casing
	ZA 5G	Casing like ZA with option 5G

Mounting Notes
 The device is available in three versions, see box on the right. Two are suitable for mounting on a top hat rail. One has a flanged housing with screw lugs. The different versions have different order numbers, which can be found in the variant table above.



Pin allocation 9 pin Sub-D Serial

Pin	RS232		RS485/422	
	Funct.	IN/OUT	Funct.	IN/OUT
1	DCD	IN	NC	
2	TxD	OUT	Tx+	OUT
3	RxD	IN	Rx-	IN
4	DSR	IN	NC	
5	GND		GND	
6	DTR	OUT	NC	
7	CTS	IN	Rx+	IN
8	RTS	OUT	Tx-	OUT
9	RI	IN	NC	



Technical Data

Dimensions	s. Sketch above
Weight	approx. 500 g
Environment	Temperature range 0 - 60° C, Protection class IP 20
Voltage supply	10 to 60 V DC via 5 pin M12 connector (screwable) or PoE (802.3af) via LAN-Port
Power consumption	max. 10 W (4,5 W in Idle Mode)
Ethernet	2x LAN-Port 10/100/1000 MBit Auto MDI/MDIX (RJ45)
Serial	1x RS232 9-pol. Sub-D socket, 300 Baud - 460,8 kBit/s, RTS, CTS, DSR, DTR
USB	1x USB 2.0 for firmware updates / for logging system messages onto USB storage media / for USB adapters with additional interfaces
Relay	1x change-over switch max. 1A@24V, max. 125VAC

WLAN WiFi 6

Technology	802.11 a/b/g/n/ac/ax WLAN (2,4 GHz + 5 GHz) Features: OFDMA, 1024QAM, MU-MIMO, TPC/DFS, TWT				
Antennas	2x Antenna (2T2R MIMO) RPSMA antenna connectors				
Encoding	WEP (64/128 Bit) + TKIP/AES				
Security	802.11i WPA(2 + 3) – PSK 802.1x EAP-PEAP, -TLS, -TTLS, -LEAP				
Fast Roaming	802.11r + 802.11k				
Channels	2,4 GHz ETSI 1-13, USA/Canada 1-11 5,0 GHz ETSI + USA/Canada 24 (36 – 165) (U-NII-1 + UNII-2A + U-NII-2C+U-NII-3)				
Data rates (brutto)	Frequency	2.4 GHz		5 GHz	
	Channel width	20 MHz	40 MHz	80 MHz	160 MHz
	1 Antenna	144 MBit/s	287 MBit/s	600 MBit/s	1.201 MBit/s
	2 Antennas	287 MBit/s	574 MBit/s	1.201 MBit/s	2.402 MBit/s

5G (optional, s. table Variants above), worldwide 3G/4G/5G in Multi-Mode

Technology/ Bands	5G NR	NSA	n1/n2/n3/n5/n7/n8/n12/n13/n14/n20/n25/n26/n28/n29/n30/n38/n40/n41/n48/n66/n71/n75/n76/n77/n78/n79	
		SA	n1/n2/n3/n5/n7/n8/n12/n13/n14/n20/n25/n26/n28/n29/n30/n38/n40/n41/n48/n66/n71/n75/n76/n77/n78/n79	
	LTE	LTE-FDD	B1/B2/B3/B4/B5/B7/B8/B12/B13/B14/B17/B18/B19/B20/B25/B26/B28/B29/B30/B32/B66/B71	
		LTE-TDD	B34/B38/B39/B40/B41/B42/B43/B48	
		LAA	B46 (only support 2 x 2 MIMO)	
UMTS	WCDMA	B1/B2/B4/B5/B8/B19		
SIM	1 x Standard/Mini-SIM Slot			
Antennas	4x SMA			
Data rates (max.)	Mode	Data rate		
	5G SA Sub-6	Download 2.4 Gbps	Upload 900 Mbps	
	5G NSA Sub-6	Download 3.3 Gbps	Upload 600 Mbps	
	LTE	Download 1.6 Gbps	Upload 200 Mbps	
	WCDMA	Download 42 Mbps	Upload 5.76 Mbps	

