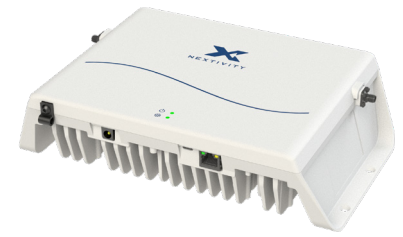# CEL-FI GO G51
Self-Configuring 5G NR Cellular Coverage Solution

KIT#: G51-LE-001, G51-LE-002, G51-LE-003, G51-ME-001, G51-ME-002, G51-ME-003

Bringing the power of the macro 5G network indoors, CEL-FI GO G51 solves coverage challenges for the shorter range of mid-band 5G NR. The system delivers industry-leading signal gain up to 100 dB to overcome mid-band 5G NR coverage challenges that no other solution can. In addition to unmatched performance, GO G51 is compact, easy to use, and does not require manual configuration, making it easier than ever before for building owners to equip their buildings with 5G connectivity and ensure better voice quality, 5G data speeds, and fewer dropped calls. GO G51 is perfect for small- to medium-sized buildings, operator-approved, unconditionally network safe, and offers the flexibility to support various 2G/3G/4G and 5G cellular networks.

CEL-FI GO G51

Use Nextivity **WAVE** App to view real-time system performance.

Features and benefits include:

- Mid-band (3.5 GHz) 5G NR coverage with 100 MHz channel bandwidth
- Dual-band relay to extend 2G/3G/4G coverage with mid-band 5G NR
- Powered by the latest 4th generation Nextivity proprietary IntelliBoost chip, delivering industry-leading and unconditionally network safe performance
- Establishes network safe uplink power in real-time and automatic uplink muting when no active user equipment is detected
- Ease of remote monitoring and management with Nextivity WAVE Portal and WAVE App

Specifications

Frequency Bands	n78 and 1/3/5/7/8/20/28L
Relay Channel Bandwidths (MHz)	100 and 5/10/15/20
Networks	2G/3G/4G/5G
Network Protocols	GSM/WCDMA/LTE/DSS/NR
Network Selection	Automatically best available (WAVE App and WAVE Portal for manual setting)
Network Operator	Configured to authorized operator PLMN-IDs
Duplex Modes	FDD and TDD
# of Relay Bands (max.)	2
Relay Bandwidth (MHz max.)	100 + 20
Output Downlink Power (Bands 1/3/5/7/8/20/28L) (dBm max.)	20 (16 in U.K.)
Output Downlink Power (Band n78) (dBm max.)	27
Output Uplink Power (Band n78) (dBm max.)	24
Output Uplink Power (Bands 1/3/7) (dBm max.)	22
Output Uplink Power (Bands 5/8/20/28L) (dBm max.)	20
System Gain (dB max.)	100
Enterprise-Grade Echo Cancellation (dB min.)	30
Return Loss (dB typ.)	-8

Bands

Frequency Bands	Downlink (MHz)	Uplink (MHz)	Max. Relay BW (MHz)
1	2110-2170	1920-1980	20
3	1805-1880	1710-1785	
5	869-894	824-849	
7	2620-2690	2500-2570	
8	925-960	880-915	15
20	791-821	832-862	20
28L	758-788	703-733	
n78	3300-3800		100

Interface

Donor RF Connector	SMA (f)
Server RF Connector	SMA (f)
DC Input	5.5 x 2.1 mm (f) Barrel
LAN	RJ45 Jack
Device Setup	LAN for WAVE Portal
	Bluetooth for WAVE App
Power and System Status	Bi-color LED (Green/Red)
LAN Status	Bi-color LED (Green/Red)
Factory Debug only	USB 2.0 Micro-B
System Management and SW Updates	WAVE App for iOS 11.0 or later
	WAVE App for Android
	WAVE Portal for Desktop

Compliance

3GPP	3GPP TS 25.143 Rel 13
	3GPP TS 36.143 Rel 13
	3GPP TS 38.106 Rel 17
CE	Compliant
	RED 2014/53/EU
	ErP 2009/125/EC
RoHS3	EN 63000: 2018
OFCOM	VTS 2102
ACMA	EN 55032:2015
R-NZ	AS/NZS 4268:2017
Bluetooth	LE Ver 4.2

Power Supply

Power Consumption (W max.)	60
AC Cable Plug	Type C (EU) or Type I (AUS) or Type G (UK)
AC Cable	18 AWG
AC Cable Length (ft (m))	6 (1.8)
DC Cable Length (ft (m))	3.3 (1)
DC Cable	16 AWG

Environmental

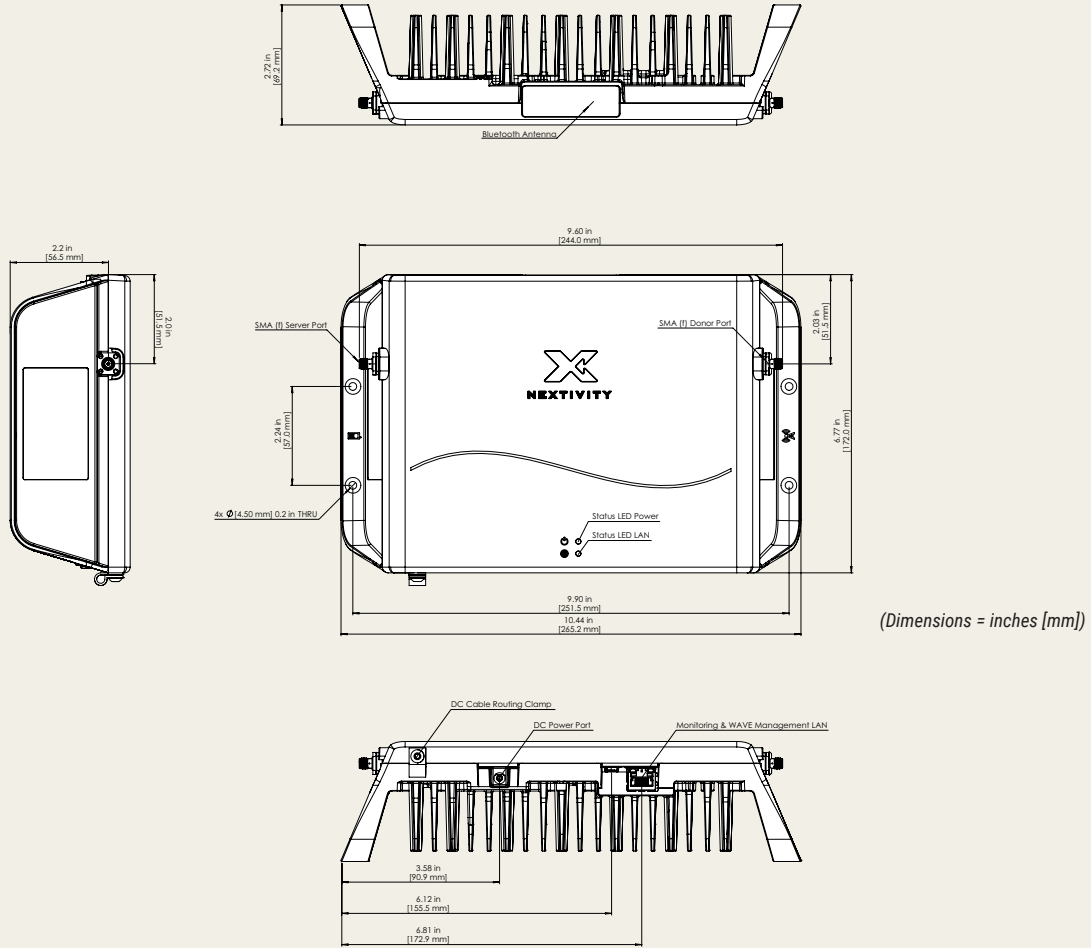|	
Operating Temperature (°F (°C))	32 to 104 (0 to 40)
Storage Temperature (°F (°C))	-31 to 158 (-35 to 70)
Heat Dissipation	Passive Convection
Surface Temperature (°F (°C) max. at ambient)	111.2 (44)
Non-condensing Humidity (%)	0 to 95
Ingress Protection Rating	IP20 Indoor Only

Mechanical

Main Unit Dimensions (in (mm))	10.44 x 6.77 x 2.72 (265.2 x 172.0 x 69.2)
Main Unit Weight (lbs (kg))	4.8 (2.2)

Ordering Information

KIT#	G51-ME-001	G51-ME-002	G51-ME-003	G51-LE-001	G51-LE-002	G51-LE-003
Region	EMEA			APAC		
Frequency Bands	n78 and 1/3/5/7/8/20			n78 and 1/3/5/7/8/28L		
Box Contents	Main Unit					
	1x Donor Antenna (A21-ML3-601)			1x Donor Antenna (A21-ML3-601)		
	1x Server Antenna (A41-NL3-300)			1x Server Antenna (A41-NL3-300)		
	10 m RG 58 Cable (C200-RG58-10)	10 m LMR 195 Cable (C200-195-10)		10 m RG 58 Cable (C200-RG58-10)	10 m LMR 195 Cable (C200-195-10)	
	AC Adapter					
	4x Mounting Screws					
	4x Drywall Anchors					
	Quick Installation Guide					
Kit Shipping Dimensions (in (mm))	11.03 x 8.96 x 4.56 (280.2 x 227.6 x 115.8)					

CEL-FI GO G51 Main Unit Outline

(Dimensions = inches [mm])

Product specifications are subject to change without prior notification.