INTRODUCTION

GXC's GM01 Relay allows a G101 or G501 Access Point to wirelessly connect to the GXC Onyx Gateway Node. This is accomplished through self-interference mitigation techniques that allow for access and backhaul carriers to co-exist in CBRS Band 48.

Combined with GXCs Onyx Platform for orchestration, management, and SAS registration, GM01 offers coverage extension and rapid deployment where wired infrastructure is unavailable.

BACKHAUL

Band Support	Band 48 CBRS
Radio Technology	LTE: CAT12, up to 2CA, 2x20MHz
Antenna Configuration	1T2R
Antenna Connector	2 x Type N
TX Power	20dBm max RMS
RX Sensitivity	-92dBm per 10MHz carrier
SIM Support	Dual-SIM, 2FF, external access

ACCESS

Band of Operation	Band 48 CBRS
Antenna Configuration	2T2R
Antenna Connectors: AP Input	2 x Type N
Antenna Connectors: AP Antenna	2 x Type N
Max AP Input Power	33dBm per port
Antenna Isolation: Access to Backhaul	45dB minimum
Insertion Loss AP Interface	2.6dB typical

HARDWARE

Power: Nominal Vin	48VDC
Input Voltage Range	36V to 60V
Isolation	Input to Field-GND: 2.5 kVDC
Power Consumption	20W maximum
AP Data Interface	RJ45 1GbE IEEE-802.3ab, non-PoE
Wireless Diagnostic Interface	Wi-Fi diagnostic access point, 2.4GHz
Installation	Pole or Wall Mount*
Dimensions	13.9 x 9.7 x 5.3 inches
Weight	18.75 lbs. (8.505 kg)

HIGHLIGHTS

- Operation in Citizens Broadband Radio Service (CBRS) Band 48

- Suitable for private and public deployment, indoor or outdoor applications with IP66 rated enclosure

- GUI-based remote Web management, with local Wi-Fi diagnostic access to simplify installation

- Core differentiating technology is ability to connect Access Points wirelessly to provide ultra-dense, reliable networks without the need to build upon existing wired infrastructure

- Utilizes the same spectrum for backhaul (node-to-node) connectivity, and access (node-to-device) which simplifies radio planning and allows for design portability anywhere in the US

- Low power consumption suitable for off-grid solar power applications

- Multiple external antenna options for both access and backhaul allow for a customized deployment, providing coverage where it is most needed

- Configured out-of-the-box to work with GXC's Onyx Platform

- Wall or Pole mount *(Mounting Kit must be ordered separately!)

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ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40 to +55C
Storage Temperature	-45 to +85C
Humidity	5% to 95% RH
Atmospheric Pressure	751 to 1014 mbar (Sea Level to 2000 meters altitude)
Water / Dust Ingress	IP66
Operational Vibration (Random)	+12 dB/octave from 5 to 10 Hz, 0.04 m^2/s^3 from 10 to 50 Hz, -12 dB/octave from 50 to 100 Hz, 3 axes x 30 minutes, per IEC 60068-2-64 (Fh)
Operational Shock	100 half-sine pulses at 50m/s^2 with 11ms duration each of 6 directions per IEC 60068-2-27 (Ea)
Salt-Fog Corrosion	240 hrs at 35°C, 5% NaCl Salt Mist per IEC 60068-2-11 (Ka)

CERTIFICATIONS

Certifications	FCC part 15 (US)
	FCC part 96 (US)

PART NUMBERS

GXC-MEN-001	GM01

Mounting Kit must be ordered separately

The GXC GM01 is designed to work in conjunction with a GXC G101 or GXC G501 Access Point. The Access Point is required in order to use the GM01.