TECHNICAL DATA SHEET
IOT Gateway

FAGERHULT

Art. no: 86296

Organic Response G3 IOT Gateway

Gateway for connection to Organic Response Portal. Incl. power adapter and wall bracket. Controls a maximum of 150 sensors.
The IOT Gateway supports existing devices connected to the Organic Response mesh network with significantly increased connectivity range, multi-level security features, automatic security updates and can be powered either via a power supply or alternatively if supported by the infrastructure can be powered over the Ethernet (PoE).

TECHNICAL DATA	
HOUSING DIMENSIONS	H: 30 mm x L: 127 mm
IoT GATEWAY WEIGHT	155 g
WALL/CEILING MOUNTING (OPTIONAL)	- Mounting backer plate - Mounting hardware 1. Drywall Anchor, #6-#8 Screw, 1-1/4" Lenght 2. M3 x 50 mm Length, Pan Head Philips #1, Machine Saw 3. Screw, Pan Head Philips Sheet Metal #6/18x1.25"
POWER SUPPLY	5 V, 2 A (10 W) AC/DC Wall Adapter or PoE 802.3af
POWER CONSUMTION	10 W (max)
CURRENT CONSUMTION	Highly dependent upon the unit configuration and programmed software
PR PROTOCOL	Wireless Mesh
FREQUENCY BAND	2.402 to 2.480 GHz
MODULATIONS	GFSK at 1 Mbps data rates
TRANSMIT POWER	12 dBm
RECIEVER SENSITIVITY	-108 to -98 dBm, depending on modulation
COMPATIBLE SENSOR NODE	Organic Response g3-sensor nodes
AMBIENT TEMPERATURE (ta)	0 °C ... 60 °C
MAX NUMBER OF NODES PER GATEWAY	150
MAX RANGE TO CLOSEST SENSOR NODE	5 m
ETHERNET	RJ45 10/100Mbps
ELECTRICAL SAFETY COMPLIANCE	EN60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013 EMC COMPLIANCE EN 300 328 V 2.1.1 (2016-11) Draft EN 301 489-1 V2.2.0 (2017-03) Draft EN 301 489-17 V.3.2.0 (2017-03) ETSI EN 301 893 V 2.1.1 (2017-05) EN 62311:2008
COMPLIES WITH CE DIRECTIVES	EMC Directive 2014/30/EU Radio Equipment Directive 2014/53/EU RoHS2 Directive 2011/65/EU

NETWORK REQUIREMENTS

REMOTE HOST	PROTOCOL	PORT
Ubuntu Core Required Hosts		
0.ubuntu.pool.ntp.org	UDP	123
ntp.ubuntu.com		
geoip.ubuntu.com	TCP/HTTPS	443
login.ubuntu.com	TCP/HTTPS	443
api.snapcraft.io		
dashboard.snapcraft.io		
storage.snapcraftcontent.com		
canonical-lgw01.cdn.snapcraftcontent.com		
canonical-lcy01.cdn.snapcraftcontent.com		
canonical-lcy02.cdn.snapcraftcontent.com		
canonical-bos01.cdn.snapcraftcontent.com		
cloudfront.cdn.snapcraftcontent.com		
fastly.cdn.snapcraftcontent.com		
fastly-global.cdn.snapcraftcontent.com		
Rigado Required Hosts		
provision.azure.rigado.com	TCP/HTTPS	443
api.azure.rigado.com		
mqtt.azure.rigado.com		
provision.rigado.com		
serial-vault.rigado.io		
api.rigado.com	TCP/HTTPS	443
diagnostics.rigado.com	TCP/HTTPS	443, 80
diagnostics.azure.rigado.com		
a2fyo1pewinh1f.iot.us-west-2.amazonaws.com	TCP/MQTT	8883 or 443
a2fyo1pewinh1f-ats.iot.us-west-2.amazonaws.com		
OR Required Hosts		
https://portal.organicresponse.com	TCP/HTTPS	443
	TCP/MQTT	8883
	UDP	123
http://a2bghq9neujukx.iot.ap-northeast-1.amazonaws.com/	TCP/HTTPS	443
http://a2bghq9neujukx-ats.iot.ap-northeast-1.amazonaws.com/	TCP/MQTT	8883
	UDP	123
For New Configuration/reconfiguration (Jan 2022 onwards)		
a34occh7iu2muo-ats.iot.ap-southeast-2.amazonaws.com	TCP/HTTPS	443
	TCP/MQTT	8883
	UDP	123

Refer to the following ports (inbound & outbound) with services accessing thoser ports;

If an IoT gateway is required to be installed on your site that has restricted acess or firewall setup, you may need to contact network administrator before installation to allow gateways the appropriate access permissions.

GATEWAY PLACEMENT

The gateway is suitably placed as centrally as possible in the lighting installation.

If multiple gateways are required (> 150 nodes), these should be distributed proportionally for the best possible communication with two or more networks.