

Vacuum Datasheet

Model PRGEN-VAC

SMARTREK Datasheet VACUUM

Why use the vacuum A-Link

A sudden fluctuation in vacuum pressure can drastically affect your equipment and operations. The Smartrek monitoring system provides real-time data insights into the performance of your system and will alert you when such changes occur proactively.

Applications

- HVAC
- Vacuum pumps
- Factory automation / industrial equipment
- Fire suppression system
- Pneumatic controls
- Agriculture irrigation systems
- Water and Wastewater applications
- Dewatering process

Features

- 1 to 3 channel vacuum pressure
- Up to 10 km (7mi) range
- High pressure accuracy
- Robust design for outdoor environments
- Up to 5 years battery life expectancy
- Simple 5/16 barb pipe fitting connection port
- Wide compensated temperature 0 to 85°C



Figure 1: Vacuum A-Link

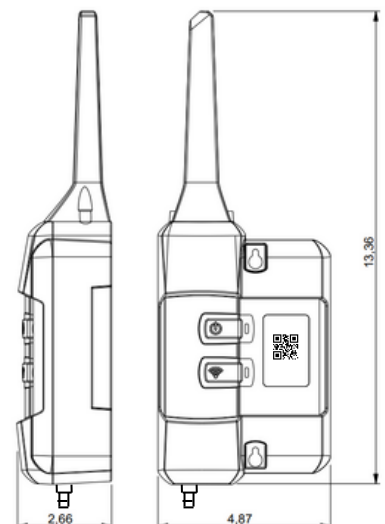
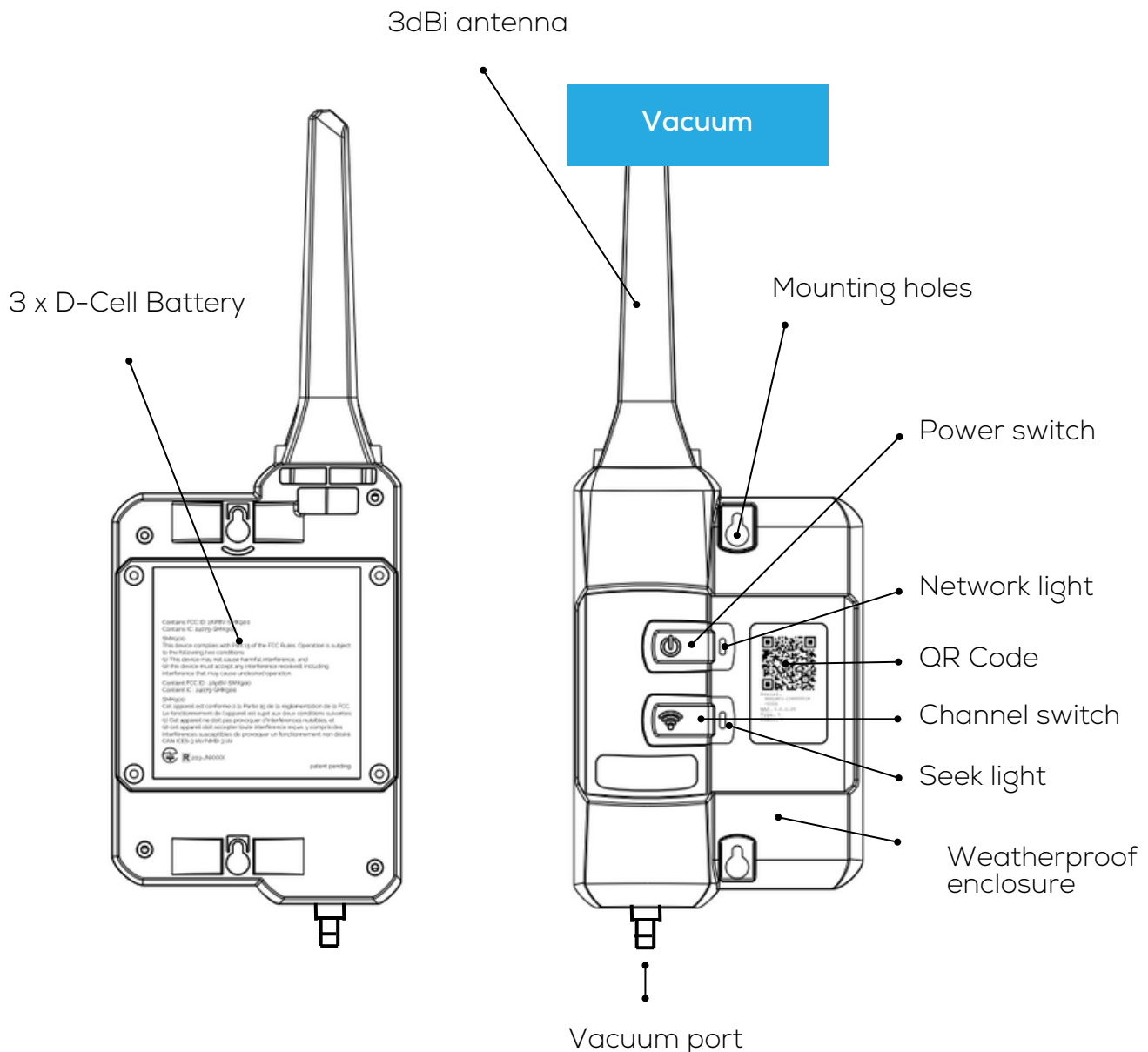


Figure 2: Technical drawing

Why use the vacuum A-Link

The PRGEN-VAC is a highly accurate pressure sensor for measurement in gas media, with a total error band of less than 1.0% over the compensated pressure range. It is fully calibrated, temperature compensated and can take up to two pressure measurements. It has various versions with pressure ranges of up to 150psi and can measure differential, gauge absolute, compound, or vacuum measurements. The PRGEN-VAC also features a PTFE membrane at the inlet of the pressure port, which acts as a barrier against the backflow of liquids, protecting the integrity of the transducer.



General specifications

Specifications	Performance
Frequency Band	North America: 902-928MHz Europe, Australia/ NZ: 860MHz Japan: 925MHz
Wireless technology	SpiderMesh
Encryption	AES-128
Range	Up to 10km/7Miles (LOS*) 500m average (NOLS**) 300m (decidious forest)
Max hop count	30 (total range is 30x node-to-node range)
Max number of A-Link on network	Unlimited

*LOS: line of sight **NLOS: near line of sight

Technical specifications

Specifications	Unit	Performance
Number of port	-	1 to 3
Pressure unit	BAR, PSI	-
Pressure accuracy	kPa	1.5
Pressure range	kPa	0 to 100
Absolute max load pressure	kPa	200
Type of pressure	-	Gauge pressure
Pressure media	-	Non-corrosive gases
Temperature compensation range	°C	0 to 85

General specifications



Figure 3: Connected Vacuum node

Power consumption

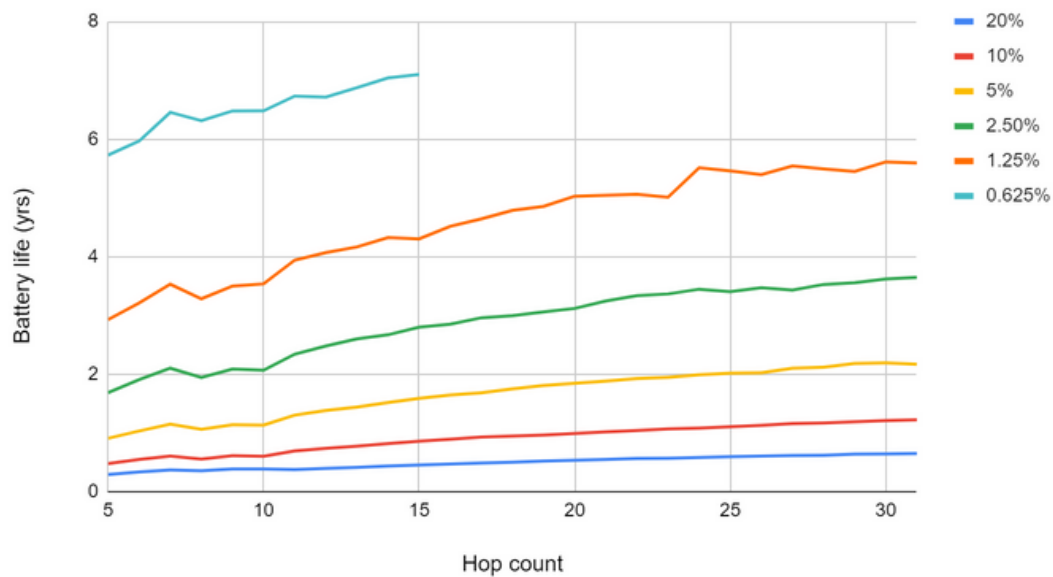


Figure 4: Battery life vs. hop count

Ordering information

