

Pulse[®] Pro Extender

Manual 3A8209B

EΝ

Improves Pulse[®] Pro device network coverage and capacity to support RF communication in a Pulse Pro system. For professional use only.

Not approved for use in explosive atmospheres or hazardous (classified) locations.

Extender

Model	Description	Approval
20A058	Pulse Pro Extender North America	cETLus, FCC, IC
20B058	Pulse Pro Extender North America	cETLus, FCC, IC
20A059	Pulse Pro Extender International	CE
20A152	Pulse Pro Extender ANZ	RCM
20A151	Pulse Pro Extender UK	UKCA



Important Safety Instructions

Read all warnings and instructions in this manual and in all related Pulse manuals before using the equipment. Save all instructions.

Related Manuals

Manual in English	Description
3A5414	Pulse [®] Hub



Component Identification



Fig. 1

Key:

A Red LED

B Blue LED

C Button

Extender Status

Flashing: briefly lit every second.

Blinking: lit every other second.

Blue Light	Red Light	Status	
OFF	ON	Powering On/Configuring	
ON	OFF	Connected	
ON	ON	Powered On/Not Connected	
Flashing	ANY	Checking connection status	
Blinking	ANY	Attempting to register to the device network	

Installation

The Pulse Pro Extender is installed/plugged directly into a standard outlet that does not exceed 240 VAC.

Definition of terms used in device registration:

- Flashing: briefly lit every second.
- Blinking: lit every other second.

Registering Pulse Pro Extender

- 1. Open the Pulse Pro Fluid Management software and turn on Discovery mode.
- 2. Connect power to the Extender.
 - a. The red light turns on.
 - b. Wait until the red light and blue light turn on, about 30 seconds.
- 3. Press and hold the button on the Extender for five (5) seconds, then release.
- The blue light begins flashing. When registration of the Extender starts, the blue light begins blinking. Once registration is complete, the blue light remains lit.
- 5. Review the Pulse software to confirm discovery of the Extender. If it does not confirm, see **Troubleshooting**, page 5.
- Exit Discovery mode on the Pulse Pro Fluid Management software.

NOTE: It may take up to three (3) minutes for the Pulse Pro Extender to receive a message from the HUB that clears the red light.

Recycling and Disposal

End of Product Life

At the end of the product's useful life, dismantle and recycle it in a responsible manner.

 Do not dispose of batteries or electronic components with household or commercial waste.

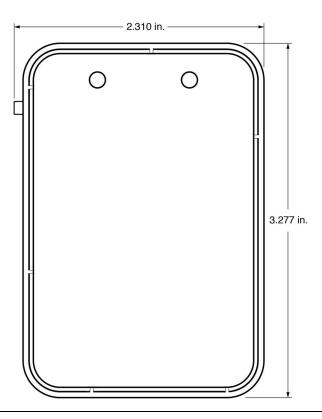


• Deliver remaining product to a recycling facility.

Troubleshooting

Problem	Cause	Solution
Unable to move between Pulse Device Networks (i.e. HUB to the Remote Extender), Registration fails (solid blue light, no red light).	The original connected Device network is in range.	Press and hold the button for 20 seconds to temporarily disconnect the Extender from any device networks. Then retry Discovery process.
No lights	Device is not powered.	Check the outlet power.
	Device is damaged.	Replace the Extender.
Device failed to discover Extender (solid blue light, solid red light).	The device is not connected to a network.	Move the device closer to connected HUB or Remote Extender.
		Follow the steps in Registering Pulse Pro Extender , page 3. to discover the device with a HUB or Remote Extender.
		Confirm that the HUB is running and that the Remote Extender is connected (if applicable).
		Wait for the Extender to reconnect to the device network (3 to 10 minutes), because the HUB or Remote Extender may have recently been rebooted.
		Reboot the HUB or Remote Extender.

Dimensional Drawing



Technical Specifications

Extender					
	US	Metric			
Power Supply	100 - 240 VAC				
Current	1 A				
Operating Temperature Range	32°F to 140°F	0°C to 60°C			
Storage Temperature Range	-40°F to 176°F	-40°C to 80°C			
RF Frequency Band	2400 - 2483.5 MHz	2400 - 2483.5 MHz			
Maximum RF Transmit Power					
Model 20A058- NA	+19.9 dB				
Model 20B058, 20A059, 20A152, 20A151- INT	+8.0 dB				
Maximum Operating Altitude	6560 ft above sea level	2000 m above sea level			
Operating Humidity Range	0 - 80% (non-condensing)				
Pollution Degree	Intended Environment: Pollution Degree 2				
Weight	0.5 lb	0.25 kg			
Ingress Protection	IPX0	IPX0			

Compliance

Contains Model XBEE3 Radio, IC: 1846A-XBEE3

This Extender contains FCC ID MCQ-XBEE3. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not case harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

California Proposition 65

CALIFORNIA RESIDENTS

MARNING: Cancer and reproductive harm – www.P65warnings.ca.gov.

Graco Standard Warranty

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

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For the latest information about Graco products, visit www.graco.com. For patent information, see www.graco.com/patents.

TO PLACE AN ORDER, contact your Graco distributor or call to identify the nearest distributor.

Phone: 612-623-6928 or Toll Free: 1-800-533-9655. Fax: 612-378-3590

All written and visual data contained in this document reflects the latest product information available at the time of publication.

Graco reserves the right to make changes at any time without notice.

Original instructions. This manual contains English. MM 3A8209

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