

Fire detection and evacuation solutions that save lives.

Reach Wireless Output Module

Features

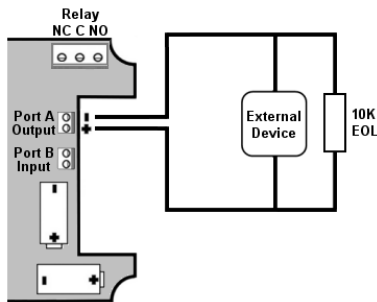
- Fully supervised output
- Alarm & Fault condition monitored output
- Bi-directional wireless communication
- Dual channel redundancy
- Five year product warranty

Description

The Reach Wireless Output Module has a single fully monitored output circuit which allows simple integration of third-party equipment with the fire detection & alarm system. The Input Module adaptive radio signal processing algorithms ensure the highest levels of life safety and system reliability. The unit is powered entirely from its internal battery supply and is fitted as standard with both a set of change over relay contacts and a 12/24V dc output. The output is capable of supplying power for operating low current third party equipment directly from the internal batteries.

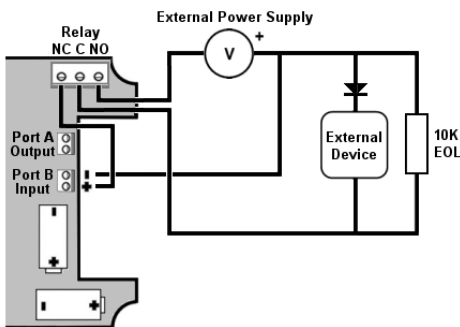
The Output Module has 3 wiring options available.

Option 1 - External device driven



Provides a maximum external drive of 100 mA at 12 Vdc or 50 mA at 24 Vdc. The 10KΩ EOL resistor monitors whether the cable has been damaged or the connection is no longer available.

Option 2 - Supervised relay switch output with polarized load.



Ensure the device connected to the Output Module is not drawing more than 2A at 30V. Drawing too much current through the output relay or connecting 220/240 ac mains voltage could possibly damage the unit and void warranty.



Specifications

Communication Range between Loop-Interface and Devices	100 m (in open space)
Field Device Radio Frequency Channel Pairs	22 pairs
Radiated Power	14 dBm (25 mW)
Battery Type	2x VARTA CR123A Lithium 3 V, 1250mAh typical
Battery Lifespan	4 years in normal operation with good signal strength (no dropped messages)
Operating Temperature	-10°C to +55°C
Maximum Relative Humidity	95% (non-condensing)
IP Rating	IP 65
Standards and approvals	EN54-18, EN54-25 NZS 4512 As7240.18, AS7240.25
Dimensions	136mm W x 96mm H x 57mm D
Weight (including batteries)	270 g

All data is supplied subject to change without notice. Specifications are typical at 24 V, 25°C and 50% RH unless otherwise stated.

Item Numbers

	AUS / NZ	International
Reach Output Module	4110-2104	RW1700-052APO

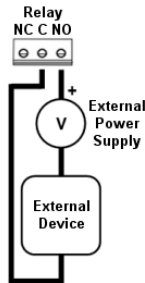
Approvals



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Option 3 - Unsupervised VFCO relay switch

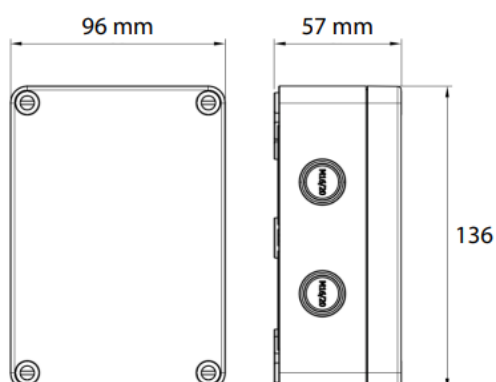


Provides a Voltage Free Clean Contact output comprising one Normally Open, Common and Normally Closed contact rated 2A at 30V.

Port Specifications

Port A	Voltage Setting				Max Load Current	
Output	12V				100 mA	
	24V				50 mA	
Output Supervision	End of Line Impedance				Module Status	Notes
	Min	Typ	Max	Units		
	6.5	10	14	kΩ	Normal	-
	0	-	2.4	kΩ	Fault	Short Circuit
R _{EOL}	14.2	-	+∞	kΩ	Fault	Open Circuit
	8	10	12	kΩ	-	-
Port B	End of Line Impedance				Module Status	Notes
Relay Supervision	Min	Typ	Max	Units		
	6.5	10	14	kΩ	Normal	-
	0	-	2.4	kΩ	Fault	Short Circuit
	14.2	-	+∞	kΩ	Fault	Open Circuit
R _{EOL}	8	10	12	kΩ	-	-
Port A	Voltage Setting				Max Load Current	
Output	30 V				2 A	

Dimensions



Status LED

The LED indicator's messages are used only during installation and servicing. LED indicator is inactive when the front cover is in place for saving up battery charge (and due to the fact that normally the LED is hidden by the front cover).

Table 1 - Reach Device Status & LED Indication

Device Status	LED Indication
Power Up	Blinks green four times
Power Up (dip-switch ON)	Blinks red four times
Entering Wake-Up	Blinks alternatively green/red four times
Link Success	Blinks green four times, then repeats
Link Failure	Enters wake-up mode and signals 'Entering wake-up mode' following this failure
Normal Condition	LED off
Alarm	Red 1s, period 2s
Battery Faults	LED off
Tamper Fault	LED off
Replaced	Blinks amber two times

Device Addressing

Device addressing is handled by the Reach Wireless Loop Interface device.

Devices are soft-addressed automatically when pairing with the Loop Interface and can be changed manually. Hard-addressing using Apollo XPERT cards are not supported.

Communication

Reach Wireless Devices use 'radio-frequency' wireless communication to connect to the Loop-Interface.

The Loop-Interface translates the wireless communication into wired XP95 protocol communication, with each device addressable individually by the fire panel.

EMC Directive 2014/30/EU

Reach Wireless Output Module complies with the essential requirements of the EMC Directive 2014/30/EU, provided that it is used as described in this datasheet.

A copy of the Declaration of Conformity is available on request.

Construction Products Regulation (EU) 305/2011

The Reach Wireless Output Module complies with the essential requirements of the Construction Products Regulation (EU) 305/2011.

A copy of the Declaration of Performance is available on request.