



# ALIEN NEXUS

## MULTIPLEXOR & CONTROLLER SYSTEM

With full Capability, Scalability & Ease-of-use, Alien Nexus Multiplexor (MUX) brings expansion & management of added read points to a single reader, at a fraction of the cost of adding additional reader hardware.

- Control up to 32 antennas with a single F800-series reader
- Plug & Play configure & control with standard reader commands
- Run & power GPIO peripherals direct from the controller
- No custom / special software needed to run!



### BENEFITS

- Expand read-zone of a single RFID reader minimizing overall H/W cost
- Use standard commands & configuration eliminating need for customized S/W to run
- Fast-track installation, configuration & deployment
- Perfect for all item tracking, document, interactive display and smart-shelf type applications
- Connect up to 4 Input & 2 Output GPIO devices direct to Nexus

### FEATURES

- Direct connection to all F800-series readers
- Multiple power options for MUX
- Compatible with all Alien RFID antennas
- Uses standard Alien Reader Protocol settings to configure/run

Need	Feature	Benefit
<b>Easy multiple antenna management:</b> <ul style="list-style-type: none"> <li>• Installation</li> <li>• Configuration</li> <li>• Maintenance</li> </ul>	<ul style="list-style-type: none"> <li>• Plug and play configuration &amp; operability</li> <li>• Use any combination of Alien RFID antennas</li> <li>• Changes to settings are done with standard Alien Reader Protocol commands</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced time to deployment</li> <li>• Special software development not required</li> <li>• Use antennas that suit application</li> </ul>
<b>Multiple power options for Multiplexor and GPIO peripherals</b>	<ul style="list-style-type: none"> <li>• User may choose to power NEXUS with +5VDC USB from F800 series reader, +12VDC from F800 or +6-24VDC external power supply</li> <li>• Same power options for GPIO peripherals (e.g. light stacks, motion sensors, switches, etc.) are available</li> </ul>	<ul style="list-style-type: none"> <li>• Use what is right for the application and not choose based on limitation of options</li> <li>• No change to electrical wiring or power source for GPIO peripherals</li> </ul>



## What is Nexus?

The Alien Nexus multiplexor system enables plug & play deployment of up to 32 added read points / read zones to a single ALR-F800 series RFID fixed reader.

Continuing the Alien hallmark of ease of configuration, use and scalability, Nexus connects is able to be configured and operated using standard Alien Reader Protocol (ARP) commands, thus eliminating the need to have custom / special software written and maintained at additional cost.

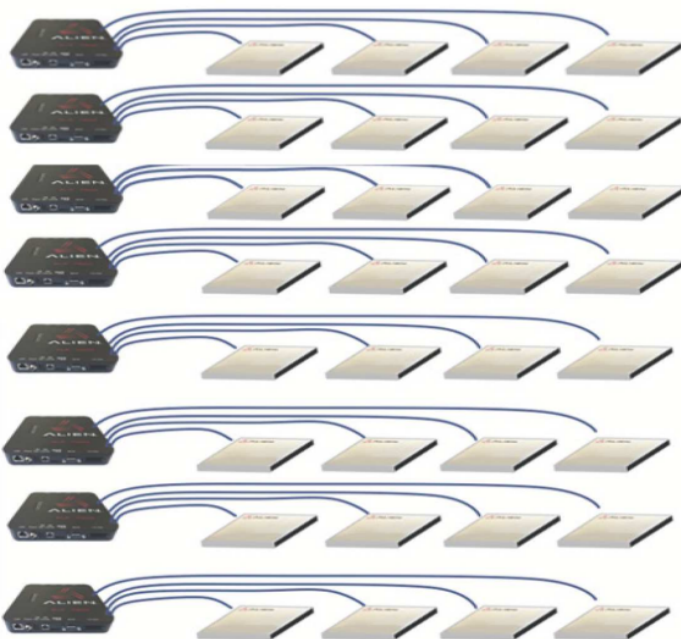
Nexus consists of:

- ALX-2530 Controller providing up to 4 Multiplexor connections
- Each ALX-2525 Multiplexor (MUX) allows up to 8 antenna connections
- The ALX-2530 Controller connects and powers up to 2 Output and 4 Input peripherals
- Choice of 3 lengths of antenna coax cable and Controller cable for flexibility of antenna & component placement without need for service loops and excess cable management

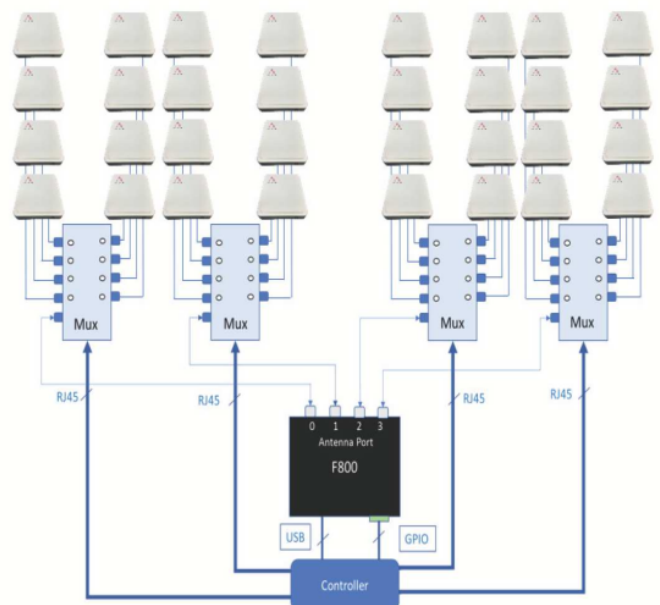
## When all that is required is read point expansion & reach...Not added complexity

When an application requires a large read zone, management of smart shelving or more of a traditional "eye in the sky" solution where all that is needed is identification and zone location of a tagged asset, Nexus allows direct addition of RFID antennas for read point expansion without the need of buying and adding additional RFID readers. This results in overall lower cost of deployment by eliminating excess equipment and the need to integrate from an installation, wiring and software management perspective.

### Traditional 32 read point deployment



### 32 read point deployment with Nexus





## Nexus Model Numbers

Model #	Description	Notes
ALX-2525	Nexus Multiplexor	Up to 4 MUX units may be connected to F800-series readers, 8 antennas per MUX, 32 total antennas possible.
ALX-2530-KIT	Includes Controller, DB15 cable, USB cable	Starter KIT including Controller, and USB & DB15 cables
ALX-2015	GPIO adapter (including Phoenix connector)	GPIO adapter for Controller
ALX-2016	USB cable for Controller and Reader connection	Control cable for reader-to-controller connect
ALX-2020-X	Antenna cable -X is 3, 6, 9 meter lengths	Antenna Cables For A0501 and A1001 series Alien antennas (8687/8 antennas use ALX-421 series cables)
ALX-2030-X	Controller to MUX control cable -X is 4, 7, 10 meter lengths	Controller cable for MUX to controller connect
ALX-2040	Ferrite for F800 power supply (snap-on)	Retrofit ferrite for older F800 power supplies
ALX-2041	Controller cable (reader GPIO to Controller)	

Controller Specifications	
Power	12VDC from reader / 5VDC from USB / 6-24VDC from external power supply
General Purpose I/O	2 Output / 4 Input available
Dimensions	(L) 18.2 cm x (W) 10.8 cm x (D) 2.9 cm (7.2" x 4.3" x 1.1")
Weight	0.18 kg (0.391 lb)
Operational Temperature	-20°C to +50°C (-4°F to +122°F)
Environmental Rating	IP52
LED Indicators	Power
Certifications	FCC, ISED

MUX Specifications	
Power	5VDC from Controller
Antennas	8 SMA antenna & 1 SMA RF IN
Dimensions	(L) 18.2 cm x (W) 11.7 cm x (D) 2.9 cm (7.2" x 4.3" x 1.1")
Weight	0.19 kg (0.410 lb)
Operational Temperature	-20°C to +50°C (-4°F to +122°F)
Environmental Rating	IP52
LED Indicators	Active antenna
Certifications	FCC, ISED

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HANDLING PRECAUTIONS Observe standard handling practices to minimize ESD.

DISCLAIMER Application recommendations are guidelines only - actual results may vary and should be confirmed. This is a general purpose product not designed or intended for any specific application.

This product is covered by one or more of the following U.S. patents: 7716208, 7716160, 7688206, 7671720, 7659822, 7619531, 7615479, 7598867, 7580378, 7576656, 7562083, 7561221, 7559486, 7559131, 7554451, 7411503, 7385284, 7377445, 7364084, 7353598, 7342490, 7324061, 7321159, 7301458, 7295114, 7288432, 7265675, 7262686, 7315249, 7214569, 7199527, 7193504, 7173528, 7172910, 7172789, 7141176, 7113250, 7101502, 7080444, 7070851, 7068224, 7046328, 6998644, 6988667, 6985361, 6980184, 6970219, 6952157. Other patents pending.

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