

Integrated, secure and reliable wireless leading communication solutions

 SMART Automation


ProSoft[®]
TECHNOLOGY



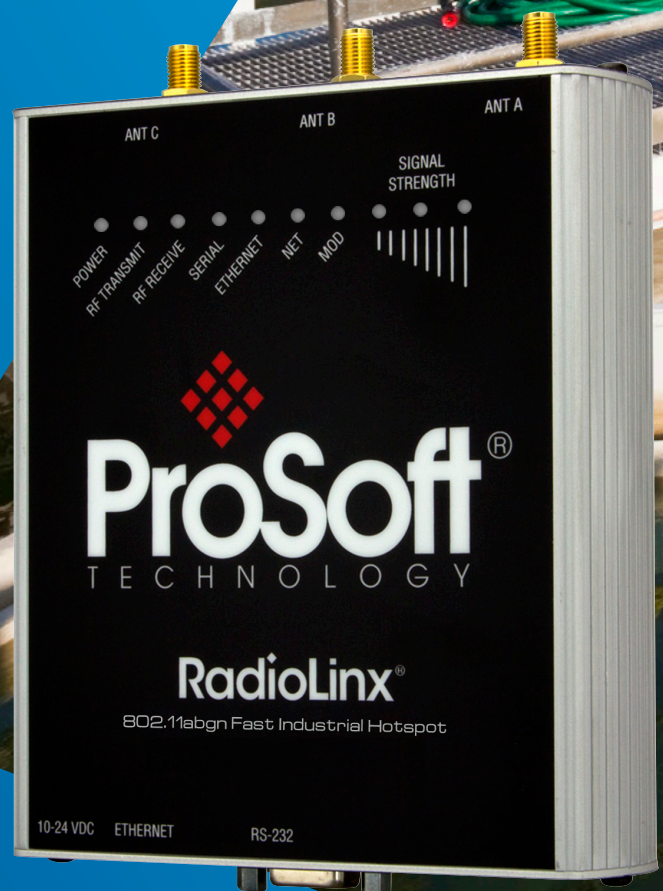
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Integrated, secure and reliable wireless leading communication solutions

The Radiolinx range from ProSoft Technology is the ultimate in telemetry application solutions. Experience market leading frequency hopping, industrial hotspot radios, intelligent cellular modems and more.

With Ethernet featuring on every plant floor and the growing ease of installation and flexibility, wireless technology is fast becoming a part of our everyday life. Radio technology in automation systems is used for monitoring conditions, systems and equipment located in remote locations where traditional means of communication cable is not a viable option.

How to use selection guide

1. Radio selection

Select a radio to best suit your application. Long range, high bandwidth and WAN options available

2. Intermediate cable selection

Intermediate cable from the radio to the bulk head or lightning protection

3. Lightning protection selection

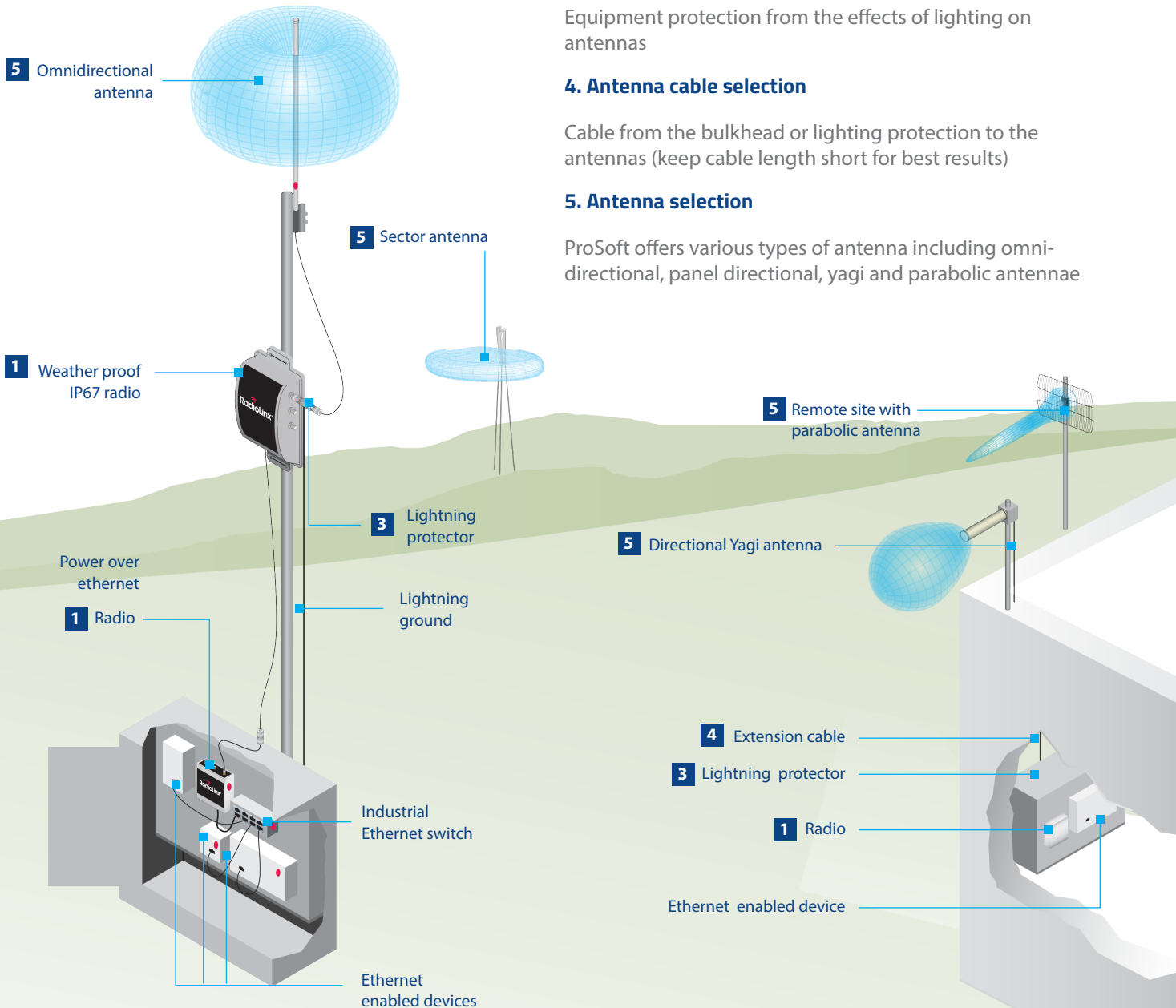
Equipment protection from the effects of lightning on antennas

4. Antenna cable selection

Cable from the bulkhead or lightning protection to the antennas (keep cable length short for best results)

5. Antenna selection

ProSoft offers various types of antenna including omnidirectional, panel directional, yagi and parabolic antennae



2.4 GHz / 5 GHz quick selection guide

1. Radio selection

Part number	Description
RLX2IHAA	Radio IH 802.11a high power 5 GHz with 2dBi Stub antenna
RLX2IHGA	Radio IH 802.11g high power 2.4 GHz with 2dBi Stub antenna
RLX2IHNFA	Radio IH 802.11abgn fast with 2dBi STUB antenna
RLX2IHNFWA	Radio IH 802.11abgn fast watertight enclosure

See page 5 for Radio Comparison chart

2. Antenna selection

Part number	Description
A5024NJDP	Antenna panel directional 24dBi N Jack 5 GHz
A2506NJOC	Antenna omni-directional 6/8dBi N Jack 2.4 / 5 GHz
A2507NPDP	Antenna panel omni-directional 7dBi 2.4 / 5 GHz
A2512NJ3DP	Antenna panel MIMO 12dBi 2.4 / 5 GHz
A2506NJ3O	Antenna omni-directional MIMO 6dBi N Jack with 3ft Pigtail 2.4 / 5 GHz
A08250380OBH	Antenna omni-directional 3dBi N BH J 806-960/1710

See page 4 for more information on Antennas

3. Lightning protection selection

Part number	Description
LP24002	Lightning protector N Jack to N bulkhead 2.4/5GHz
LP25001	Lightning protector weather proof N Jack to N bulkhead 2.4/5GHz

4. Intermediate cable selection

Part number	Description
C19M1040002	LMR 195 cable 2FT RP-SMA plug to N plug
C19M1040005	LMR 195 cable 5FT RP-SMA plug to N plug
C19M1080005	LMR 195 cable 5FT RP-SMA plug to N Jack *
C19M1040020	LMR 195 cable 20FT RP-SMA plug to N plug

* For use without a lightning protector

5. Antenna cable selection

Part number	Description
C40M4040002	LMR 400 cable 2FT N plug to N plug
C40M4040005	LMR 400 cable 5FT N plug to N plug
C40M4040010	LMR 400 cable 10FT N plug to N plug
C40M4040020	LMR 400 cable 20FT N plug to N plug
C40M4040040	LMR 400 cable 40FT N plug to N plug

Other cable, antenna and radio variants are available. Please contact your local NHP Account Representative for more information.

Prosoft antennas

ProSoft® offers various types of antennas including omni-directional, panel directional, yagi and parabolic. All antennas have been tested for compatibility with RadioLinx products. When selecting antennas to suit your application, consider your radio frequency, mobile or fixed application, range and Fresnel zone.

MIMO antenna (multi input, multi output)

Multiple antennas are used at both the source (transmitter) and the destination (receiver). The antennas at each end of the communications circuit are combined to minimise errors and optimise data speed.

- Three antennas within a single enclosure
- Send more data simultaneously
- Improve the ability of the radio to receive weak signals, providing better range

Omni-directional antenna

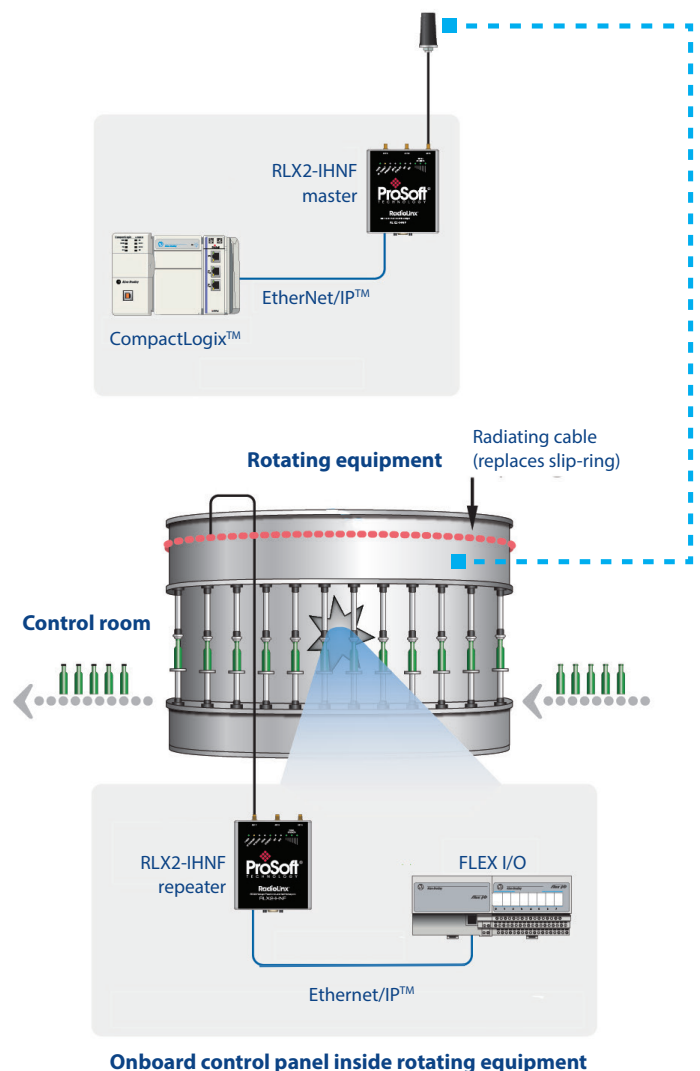
- Link multiple directional antennas in outdoor point-to-multipoint communication systems
- Cover large areas efficiently with 360-degree signal pattern

Multi-band (2.4 / 5 GHz)

- Separate 2.4 and 5 GHz antennas for single or dual radio operation
- Maximises 802.11n throughput through channel bonding using multiple frequency ranges
- Allows 802.11n radio to determine optimal rate to use based on environmental conditions and endpoint capabilities

Radiating cable

Radiating cable is a long, flexible antenna with slots to radiate RF signals that can be installed around corners, along monorail systems and through tunnels to propagate wireless data signals in situations that are tough or impossible for traditional antennas. Since the radiating cable antenna can be mounted within inches of where the signal needs to be received, it isolates the wireless signal from going to other machines that may be on the plant floor. The cable is available in multiple lengths to meet the needs of most applications.



Please contact your local NHP Account Representative for more information.

Wireless comparison product selection chart

Model	802.11abgn weatherproof industrial hotspot	802.11abgn fast industrial hotspot	802.11g high-power industrial hotspot	802.11a high-power industrial hotspot
	RLX2-IHNF-W(C)	RLX2-IHNF	RLX2-IHG	RLX2-IHA
Features and specifications				
Device connectivity	Ethernet	Ethernet/Serial	Ethernet/Serial	Ethernet/Serial
Frequency band(s)	2.4 & 5 GHz	2.4 & 5 GHz	2.4 GHz	5 GHz
Wireless technology	IEEE 802.11abgn	IEEE 802.11abgn	IEEE 802.11g	IEEE 802.11a
Max outdoor range (miles/km)	8 km	8 km	30km	8 km
Fast roaming	Yes	Yes	Yes	Yes
Repeater mode	Yes	Yes	Yes	Yes
Max RF data rate	300 Mbps	300 Mbps	54 Mbps	54 Mbps
Security/encryption	802.11i / 128 bit AES	802.11i / 128 bit AES	802.11i / 128 bit AES	802.11i / 128 bit AES
RF based IGMP querying	Yes	Yes	Yes	Yes
Advanced diagnostics (signal strength LEDs, web server, network management software, OPC tag server, SNMP)	Yes	Yes	Yes	Yes
Hazardous location approvals	-	-	-	-
Outdoor/wash down rated model	IP67	N/A	N/A	N/A
Wireless applications				
Long-range SCADA	N/A	N/A	Yes	Yes
Short-range SCADA	Yes	Yes	Yes	Yes
Mobile worker (Wi-Fi)	Yes	Yes	Yes	Yes
EtherNet/IP™ object	Yes	Yes	Yes	Yes
EtherNet/IP™ implicit messaging (high-speed IO)	Yes	Yes	Yes	Yes
Serial DF1, ASCII, Modbus®, DNP3, etc.	N/A	Yes (encapsulation)	Yes (encapsulation)	Yes (encapsulation)

Notes

The NHP logo consists of the letters 'NHP' in a bold, white, sans-serif font, centered within a solid blue square.

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