



4RFF

Aprisa SR: top ten smarts!

Welcome!

The Aprisa SR **point-to-multipoint radio** provides smart, secure, narrowband communications for telemetry and SCADA applications.



Aprisa SR

Thank you for choosing to read our **Aprisa SR: top ten smarts** e-book. From uncompromising security to unbeatable reliability, the Aprisa SR is smart!



1. Security

Security is **by design**, not a bolt on afterthought. The Aprisa SR offers **much, much more** than encryption in today's cyber terrorism world.

It combines key security **fundamentals**, sources and types of **attack**, types of **interfaces** and **standards** and recommendations.

To name a few **features**:

- AES 256 encryption as standard
- CCM authentication
- Proprietary wireless protocol
- Encrypted USB software upgrades
- Address filtering
- HTTPS secured management interface connection

2. Future-proof

One **serial** RS-232 port and two **Ethernet** ports mean that the Aprisa SR supports both today and tomorrow's traffic requirements, as the world **moves to IP**.

All ports can be used simultaneously and the priority of the data flow across each port can be configured. With two Ethernet ports, user and management data can be segregated, so remote log ins do not interrupt user traffic.



3. RF performance

The Aprisa SR provides unbeatable **real world** RF performance in the real world. It quite simply **makes the connections** other radios cannot!

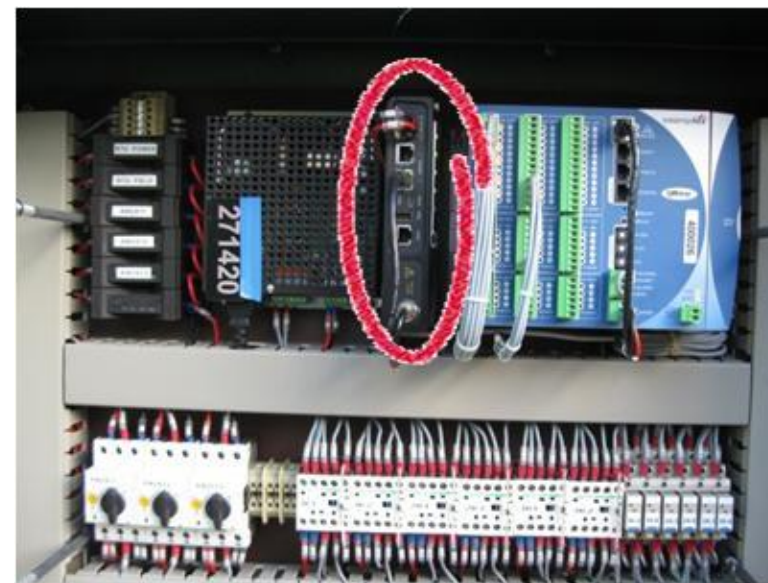
Our dual antenna port configuration supports separate transmit and receive connections to support external duplexers or filters.

This means that the Aprisa SR can be deployed even in **congested areas** where there is radio equipment already installed.



4. Flexibility

Each Aprisa SR unit can be configured as a base station, a remote station or a repeater, **minimizing spares** and enabling network reconfiguration.



Mount at any orientation!

Redundancy options include a standard protected base station and a data driven protected base station, both with automatic switchover capability.

5. Licensed spectrum

It is your critical infrastructure – **licensed spectrum** is essential to maintain the quality of service of your communications.

The Aprisa SR uses **Industry Canada RSS119** licensed spectrum in the **400 MHz band**, and is certified for use in Canada.

4RF does not design any equipment that uses unlicensed spectrum bands. **No compromise** for our products or your network.



6. You're in control

It's **your network**: why let someone else operate it? With the Aprisa SR you own and can **flexibly** design your own communications network.

What are the **benefits**?

- Cost-effective deployment
- Redeploy units as needed
- Complete financial control
- No dependence on third parties
- Licensed spectrum means guaranteed quality of service

You have **ultimate control** over every element of your network. No more dependence on third party operators. And we make it **easy** for you too.



7. Efficiency

We have designed the Aprisa SR to make the **best possible use** of your 12.5 kHz narrowband radio channels.

The radio is designed specifically to manage the small data packets needed in SCADA / telemetry networks.

To name a few **features**:

- Superior RF design
- High transmit power
- Low noise receiver
- Data interleaving and compression
- Configurable channel access parameters

8. Easy to manage

With our intuitive SuperVisor software, radios are easily **configured and managed**: locally, remotely over the air or via SNMP.

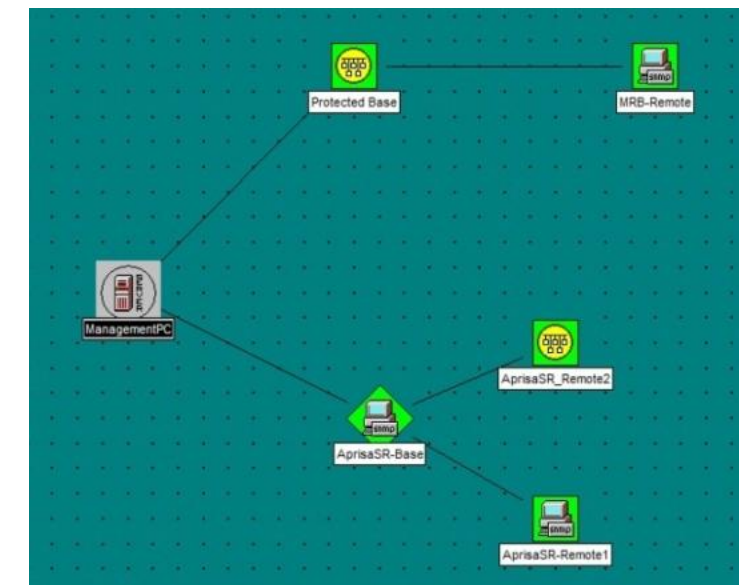
IP Addr	Mode	OK
172.25.0.39	Remote	
172.25.0.32	Remote	
172.25.0.40	Remote	
172.25.0.38	Remote	
172.25.0.37	Remote	

A web browser can then be used to view and configure all radio settings and parameters. HTTPS means that this session is **secure**.

9. SNMP support

SNMP means that you can also use your preferred **third party network management** software such as Castle Rock's SNMPc package.

You can visualize, monitor and pro-actively manage your network of Aprisa SR radios alongside other equipment in your SCADA / telemetry network.



10. Reliability

Reliability means many things, and we combine them all. **Longevity**: our attention to detail and **quality** means it lasts as long as you need it to.

Robustness, with a rugged enclosure and **immunity** to temperature extremes. It simply keeps on working, wherever you put it.

All components used in the manufacture of the Aprisa SR are fully rated to operate over the **-40°C to +70°C** temperature range.

To recap:

What is **smart**?

1. Security
2. Future-proof
3. RF performance
4. Flexibility
5. Licensed spectrum

SMART on the outside, SMART on the inside



What else is **smart**?

6. You're in control
7. Efficiency
8. Easy to manage
9. SNMP support
10. Reliability



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Thanks for reading our e-book about the Aprisa SR: we hope you enjoyed it. We would love to tell you more. Please visit www.4rf.com or email us at info@4rf.com.

All the information in this e-book is correct at March 2012: please contact us if you have an old version of this document and would like to receive the latest information!