Digital Energy
MDS

Technical Support Bulletin

**Technical Support Bulletin for SD Series
and x710 Radio Network Compatibility**

Resources and Support
Implementing SD Series Radios in x710 Networks

In June 2013 production ceased for the x710 product line. Service and repair will continue for the x710 radios for at least the next 5 years. In 2008, GE MDS introduced the next generation SD Series product line which is fully backward compatible with x710 radio networks. This Technical Support Bulletin is intended to summarize the technical support resources GE MDS users and partners can utilize for integrating SD Series radios into existing x710 networks and migrating those networks to next generation features and functionality

SD Series Models Compatible with x710/x790 Networks

Two SD Series models, the SDx-MS and SDx-SS provide operating modes that are over-the-air compatible with x710 networks as well as networks utilizing 4790 and 9790 Master Stations. The "x" in SDx and x710 is used to signify the major frequency bands a particular model supports including 1 for 150 to 174 MHz as in 1710 and SD1, 2 for 217 to 234 MHz as in 2710 and SD2, 4 for 300 to 512 MHz as in 4710 and SD4 as well as 9 for 800 to 962 MHz as in 9710 and SD9.

SDx-MS Radios:

- SD radios with the –MS extension support x710 emulation mode which is compatible with x710A and x710B radio types where B stands for backward compatible analog modems.
- In emulation mode, the SD radios also implement analog handshaking with attached devices.
- The SDx-MS radio presents the same command line user interface and instruction set used in x710 products so that users can maintain a common configuration and maintenance experience for their technical support staffs.

SDx-SS Radios:

- SD radios with the –SS extension support x710 transparent communication which is compatible with x710A modem types.
- The default user interface is the SD Device Manager which provides enhanced web based configuration management tools to the user.
- SDx-SS radios can be placed in the –MS operating mode to emulate x710B operation and command line user interface at any time.

x710 – SD Conversion Kits:

- Two conversion kits are available to support SD radio 9-pin to x710 25-pin serial conversion as well as SD radio TNC to x710 N antenna jack conversion
  - Use part number 03-4696A01 for digital conversion kits for x710A radios
  - Use part number 03-4758A02 for analog conversion kits for x710B radios
- The mounting holes for the SD surface mounting brackets are identical to the x710 radios.

Knowledge Base and Use Cases for SD Series Backward Compatibility

GE MDS has built an extensive knowledge base of use cases and applications to support our users' implementation of SD Series radios in x710 and x790 networks. To date, that knowledge base captures well over 90 different device setting combinations and connection use cases involving backward compatibility and extends even to older 2310/4310 radios.

SDx-MS/SS Backward Compatibility:

- The GE MDS Technical Support team can access our extensive knowledge base and use case library to assist with our user's implementation and migration to the SD Series. Connection and configuration assistance exists for a range of configurations including:
  - o SD Radios with x790 Masters or Polling Remotes
  - o SD Radios with x710 as Masters or P70 Masters or Polling Remote
  - o SD Radios with x310 Masters or Polling Remotes

SDx-MS/SS Training:

The GE MDS Technical Support team provides thorough classroom training for users either at GE MDS facilities or on-site at customer facilities covering SD Series capabilities, configuration and implementation processes for combined x710 and SD Series radios.

Additional Resources for SD and x710/x790 Compatibility

Users of x710 and x790 radios who are beginning their migration to the SD Series have access to a full array of resources to assist in their planning.

- For pre-sales support contact your Regional Sales Manager or Technical Application Engineer for more information on implementing the SD Series radios in your network.
- For post sales assistance, contact GE MDS Technical support for assistance concerning your specific requirements or to arrange for SD Series training
- Visit our website at http://www.gedigitalenergy.com/Communications/catalog/790Series.htm or http://www.gedigitalenergy.com/Communications/catalog/SDSeries.htm to download a copy of the SD Loyalty Brochure and request a copy of our whitepaper on migrating your network to the SD Series and evolving the capabilities of your narrowband licensed network to a broader range of serial and IP/Ethernet capabilities.