

RF500 SD Card Failure

Dec 2014

RF500A Gateway Premature SD Card Failure

Background – SD Card Failures

As a result of unexpected operational and random data issues reported by a few customers over the period of 1 year, Comark instigated a thorough investigation into the failed SD Cards; the root cause of which was confirmed to be the Master Production SD card.

A countermeasure has been put into place to ensure that all SD Cards are fault free before they are used, by way of a 'checksum' that is compared at the end of the programming cycle; additionally we have upgraded the SD Cards and working with industry experts, have re-aligned the partitioning of the SD Card to ensure that longevity is maximized.

The information we received concluded that the performance, durability and data integrity of SD cards can vary enormously between manufacturers; please be assured that the Sandisk OEM Cards that we use for the RF500A Gateway are the class leader for quality and durability.

Conclusion

Comark has investigated the RF500A Gateway failures and they have been attributed to the premature failure of the SD Cards, due to corruption of the SD Cards during the initial creation.

Comark is confident that the changes already put into place and the additional checks when producing SD Cards means that the full Gateway reliability is now restored, we will continue to investigate any failures and further software updates will significantly reduce the likelihood of any re-occurrence.

Additional Preventative Measures – Upgrade your software

Comark recommends that any customer running early versions of software, up to and including M5 should upgrade to the latest version; M8 at the time of writing. If the system is validated, then a new validation might be avoided, see table below for details of the major software updates. Please contact Comark for details on how to upgrade your software.

Additional Preventative Measures - Customer

Comark recommends regular manual backups, at least monthly, and additionally whenever you have re-tasked a transmitter. Doing this will ensure that in the event of SD Card failure Comark is able to recover the data in the shortest possible time frame.

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Version Table for RF500A Software:

The following table explains the various software versions that have been installed on RF500A Gateways since launch in 2011. Please check your version, which is available on the Hardware Page of your Gateway(s), for example:

RF500A Serial No. 25530029 / Software M7 / Firmware 1.00 : RF 2.00R / Data ID 52422

Version	Reason	Comment	Date	Software Update
M2	Launch Version	Launch Version of Gateway Software	Aug-11	Launch
M3	First Update	New Backup Software Added, and New Tx (RF542)	Mar-12	Major
M4	Second Update	Not released to Customers	N/A	N/A
M5	Third Update	Add Repeat Alarm Functionality	Jul-13	Major
M6	Fourth Update	Background Engine changes for SD Cards	Oct-14	Minor
M7	Fifth Update	Further Background changes, forced weekly manual backup.	Nov-14	Minor
M8	Sixth Update	Customer Release of M7 with forced weekly manual backup	Dec-14	Minor

My System Is Validated

If your system is validated then we still recommend that you apply the software update. However, if you have questions regards the re-validation that may be required and are unsure of the implications of the update then please contact your Distributor or Comark for more information.

Committed to Providing the Highest Standards

Comark is committed to providing our customers with class leading products and continuously improving the reliability and integrity of our RF500 Monitoring System, via software and hardware updates as appropriate. Comark is proud of its partnerships with its customers stretching over many years and is committed to provide support both now and in the future.

Best Regards,

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