# **Reason S20 Industrial Managed Ethernet Switch**

## **Firmware version 07A04 Release Notes**

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### **Overview**

GE regularly introduces firmware updates to address enhancements in different functional areas. This firmware release includes the following:

- Operation as NTP Server
- PTP improvements
- Overall improvements for user configuration

#### Firmware Release Date: October 2019

#### **Firmware Upgrade Process**

Upgrading to firmware 07A04 can be done by downloading the upgrade file directly from our website:

http://www.gegridsolutions.com/Communications/catalog/S20.htm

Firmware versions 07A00 and newer can be upgraded directly to 07A04.

- If you have an S20 with firmware version 06A02, upgrade first to firmware 07A03 and then upgrade to 07A04.
- If you have an S20 with firmware version 06A01 or lower, upgrade first to firmware version 06A02, then to 07A03, and lastly upgrade to 07A04.
- If you have an S20 with firmware version 04A01.00 or lower, upgrade first to 05A00, secondly to 06A02, then to 07A03 and finally to 07A04.

When performing multiple firmware upgrades, please make sure to save the running configuration to the startup between each upgrade, as directed in the user manual.

#### **HW Compatibility**

Firmware 07A04 is compatible with hardware version B.

Firmware 07A04 is **NOT** compatible with hardware version A.

Please contact your local sales representative or Grid Automation Global Contact Center for any questions regarding this upgrade.

## **Release details**

In the following release descriptions, a revision category letter is placed to the left of the description. Refer to the Appendix at the end of this document for a description of the categories displayed.

#### New function

#### N Operation as NTP server

- NTP clients can now rely on S20 as an NTP server.
- The S20 NTP server accepts up to 50 NTP requisitions per second.
- The switch synchronization source can be PTP, NTP or internal oscillator (data/time manually entered). The source affects the output stratum.
- The S20 NTP server can be configured using the Web Interface or CLI.

#### **IEEE 1588 (PTP) performance**

#### E PTP improvements

- Improved robustness to path delay and offset from PTP master spikes.
- Improved robustness from other 1588 devices not sending follow-up messages.
- Enhanced leap second event handling.

#### **Overall improvements**

#### E Fixed "MAC Address authorization" alarm

Fixed issue in which this alarm was not activating the fail-safe relay, LED and Failsafe Alarm Status.

#### E Fixed CPU temperature alarm range

Fixed issue in which the Lower threshold could be configured with a value greater than the value in the Upper threshold.

#### **R** System Name added to Remote Syslog Messages

The S20 now uses the system name instead of the generic string "S2020" or "S2024".

#### E Added base software file update

S20 embedded software now relies on two different files:

- Application software: available to users through GE's website as patch for new features, performance & robustness improvements, etc.
- Base software / bootloader: equipment base software, including the bootloader, on which the application software is installed. This is available through GE's contact center if needed.

## Appendix

### **Change categories**

This document uses the following categories to classify the changes.

**Table 1: Revision Categories** 

Code	Category	Comments
Ν	New feature	A separate feature added to the product. Changes to existing features even if they significantly expand the functionality are not in this category
G	Change	A neutral change that does not bring any new value and is not correcting any known problem
E	Enhancement	Modification of an existing feature bringing extra value to the application
D	Changed, incomplete or false faceplate indications	Changes to, or problems with text messages, LEDs and user pushbuttons
R	Changed, incomplete or false product records	Changes to, or problems with product records (syslog, oscillography, demand, fault reports, etc.)
С	Protocols and communications	Changes to, or problems with protocols or communication features
В	Unexpected restart	Product restarts unexpectedly

## For further assistance

For product support, contact our Grid Automation Global Contact Center:

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**Redhill Business Park** 

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Phone: +44 1785 250070

E-mail: ga.support@ge.com

Website: https://www.gegridsolutions.com/multilin/support.htm