

# Reason S20 Industrial Managed Ethernet Switch

## Firmware version 07A03 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:

- NMS integration with MDS™ PulseNET (v4.5.0)
- Cybersecurity improvements to syslog, failsafe alarms and SNMP
- Overall improvements to configuration and performance

Firmware Release Date: **May 17, 2019**

### Firmware Upgrade Process

Upgrading to firmware 07A03 can be done by downloading the upgrade file directly from our website:

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

Firmware versions 06A02 and newer can be upgraded directly to 07A03.

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

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 07A03 is compatible with hardware version B.

Firmware 07A03 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.**

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## 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.

### **N** NMS integration with MDS™ PulseNET (v4.5.0)

S20 now supports PulseNET, a Network Management Software (NMS), that includes the following features:

- System monitoring (alarms, ports, health status)
- Centralized Configuration Management (including backups)
- Automatic system discovery based on a range of IP addresses

## Cybersecurity improvements to syslog, failsafe alarms and SNMP

### **E** Additions to syslog information logs

- Configuration file download attempts
- Configuration file upload attempts
- System log download attempts
- User privilege level changes
- NTP configuration changes
- IP configuration changes
- VLAN configuration changes
- MAC table configuration changes
- Port configuration changes
- Port state changes
- Unsuccessful cable connection attempts to secure ports with static MAC addresses
- PTP events, such as ordinary/master clock state changes
- Message change: "invalid partition" changed to "partition started"

### **E** S20 now supports two syslog servers

It is now possible to configure two syslog servers.

### **E** Failsafe alarms improvements

- Added alarm for temperature with a configurable upper threshold
- Added failsafe alarm for CPU load with a configurable upper threshold
- Added failsafe alarm for used RAM with a configurable upper threshold
- Implemented latch configuration for failsafe alarms individually. If the alarm triggers and the latch is enabled, the alarm remains triggered even when the alarm condition becomes false. The alarm state is only disabled when the alarm is explicitly cleared using the "clear" button (which applies to all alarms).
- Added SNMP trap messages

### **E** Improvements in SNMP MIB files

Enhanced MIB files are available for firmware 07A03

## Overall improvements to configuration and performance

### **E NTP synchronization enhancement**

S20 NTP synchronization now follows a single NTP server when a large step occurs. Previously the S20 NTP client would not synchronize if the offset between the server and S20 was above 1000s (after being synchronized for the first time).

### **E Popup message with disclaimer after Web logon**

Added a pop-up message with disclaimer (editable) when logging through the web interface. The pop-up message in CLI continues to be available, as in the previous firmware version.

### **E Inactive user account timeout**

Added timeout configuration for inactivity in user accounts in SSH, Telnet and the Web sessions.

### **E Maximum concurrent remote user sessions are now configurable**

It is now possible to configure the maximum number of allowed concurrent sessions from remote users (SSH, Telnet and Web). The number of allowed sessions can be set between 1 and 20.

### **E Added SFTP support**

Added SFTP support for the "copy" command.

### **E PTP configuration improvements**

- VLAN 0 is now forbidden
- PTP port issues resulting in disabling the port after a reboot are fixed.

### **E Auto negotiation is now enabled for optical Gigabit SFPs**

Solves issue when S20 port would not communicate with another of same type.

### **E CLI command added**

The CLI command "SHOW LLDP NEIGHBOURS" returns the local Ethernet Interface port number.

### **E DDR memory issue fixed**

S20 now starts successfully under low temperature conditions (-20°C and lower).

### **B Restart issue fixed**

S20 no longer restarts if all SNMP groups are deleted: default\_ro\_group and default\_rw\_group

## Appendix

### Change categories

This document uses the following categories to classify the changes.

**Table 1: Revision Categories**

Code	Category	Comments
<b>N</b>	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
<b>G</b>	Change	A neutral change that does not bring any new value and is not correcting any known problem
<b>E</b>	Enhancement	Modification of an existing feature bringing extra value to the application
<b>D</b>	Changed, incomplete or false faceplate indications	Changes to, or problems with text messages, LEDs and user pushbuttons
<b>R</b>	Changed, incomplete or false product records	Changes to, or problems with product records (syslog, oscillography, demand, fault reports, etc.)
<b>C</b>	Protocols and communications	Changes to, or problems with protocols or communication features
<b>B</b>	Unexpected restart	Product restarts unexpectedly

### For further assistance

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

St Leonard's Building

Redhill Business Park

Stafford

ST16 1WT

United Kingdom

Phone: +44 1785 250070

E-mail: [ga.support@ge.com](mailto:ga.support@ge.com)

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