

Redundancy Modules

Redundancy Modules



ControlLogix redundancy modules are required for a redundant system. Standard and extreme environment modules are available.

ControlLogix firmware version 20.054 supports enhanced redundancy features for high-availability applications. Download the enhanced redundancy firmware bundle (20.054_kit1) from the [Rockwell Automation Support site](#).

The following features have been added with the revision 20.054_kit1 release:

- Addition of the 1756-RM2 and 1756-RM2XT enhanced redundancy modules.
- Redundancy module speeds of up to 1000 Mbps when using a 1756-RM2 or RM2XT module with another 1756-RM2/RM2XT module. Your system experiences the best scan performance if you use a 1756-RM2 or RM2XT redundancy module with 1756-L7x controllers in both chassis.
- The 1756-RM2/RM2XT modules are interference-free with regard to safety functions and can be used in ControlLogix® SIL2 applications.
- Redundant fiber ports for the 1756-RM2/RM2XT modules for crossloading; no single point of failure of a fiber cable.
- During a switchover of the fiber channels on the 1756-RM2/RM2XT modules, scan time can encounter a delay of ~10 ms or less; however, the chassis remains synched at all times during the channel switchover process.

Redundant Controller System Requirements

Redundant System Requirements	
Two 1756 chassis	Each chassis must have the same: <ul style="list-style-type: none"> - number of slots - modules in the same slots - redundancy firmware revisions in each module
Additional ControlNet nodes, if the application uses ControlNet networks	Two additional ControlNet nodes outside the redundant chassis pair
Redundancy module in each chassis	1756-RM, -RM2, -RMXT or -RM2XT redundancy module in each chassis, connected by a 1756-RMCx cable
ControlLogix controllers	One or two 1756-L6 or 1756-L7 controllers in each chassis
Software for enhanced redundancy systems, Revisions 20.054 and 20.054_kit1	Required: <ul style="list-style-type: none"> - Redundancy Module Configuration Tool (7.03.06 for 20.054, 8.01.05 for 20.054_kit1) - RSLinx Classic 2.59.01 (CPR 9, SR5) - RSLogix 5000 20.01.00 (CPR 9, SR5) Optional: <ul style="list-style-type: none"> - FactoryTalk Services Platform 2.50.00 (CPR 9, SR5) - FactoryTalk Alarms and Events 2.40.00 (CPR 9, SR4) - FactoryTalk Batch 11.00.00* - FactoryTalk View Site Edition 6.10.00 (CPR 9, SR4) - RSLinx Enterprise 5.50.04 (CPR 9, SR5)

* Use the most recent FactoryTalk Batch Patch Roll-up with this enhanced redundancy firmware revision. For the most recent patch roll-up, see Rockwell Automation Knowledgebase Answer ID 59058, accessible at: <http://rockwellautomation.custhelp.com/>

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Specifications [PDF]

Cat. No.	Description	Controllers Supported	ControlNet Communication Modules Supported	EtherNet/IP Communication Modules Supported
1756-RM	ControlLogix redundancy module	One or two 1756-L6 or 1756-L7 controllers in each chassis	Up to seven enhanced ControlNet communication modules: 1756-CN2/B, 1756-CN2R/B, 1756-CN2RXT	Up to seven enhanced EtherNet/IP communication modules: 1756-EN2T, 1756-EN2TR, 1756-EN2TXT
1756-RMXT	ControlLogix redundancy module rated for extreme environment			
1756-RM2	Enhanced ControlLogix redundancy module			
1756-RM2K	Enhanced ControlLogix redundancy module with conformal coating			
1756-RM2XT	Enhanced ControlLogix redundancy module rated for extreme environment			

- Features Not Supported
- Any motion feature
 - Any SIL3 functional safety feature within the redundancy controllers
 - Firmware Supervisor
 - Event Tasks
 - Firmware revision 19.052 for 1756-L7x controller

Connector Cables

Cat. No.	Description	Length
1756-RMC1	Cable, 1756-RM redundancy module	1 m (3.28 ft)
1756-RMC3		3 m (9.84 ft)
1756-RMC10		10 m (32.81 ft)

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