



**REDUNDANCY AND HIGH AVAILABILITY**

# Meet the controllers **SIMATIC S7-1500 R/H**

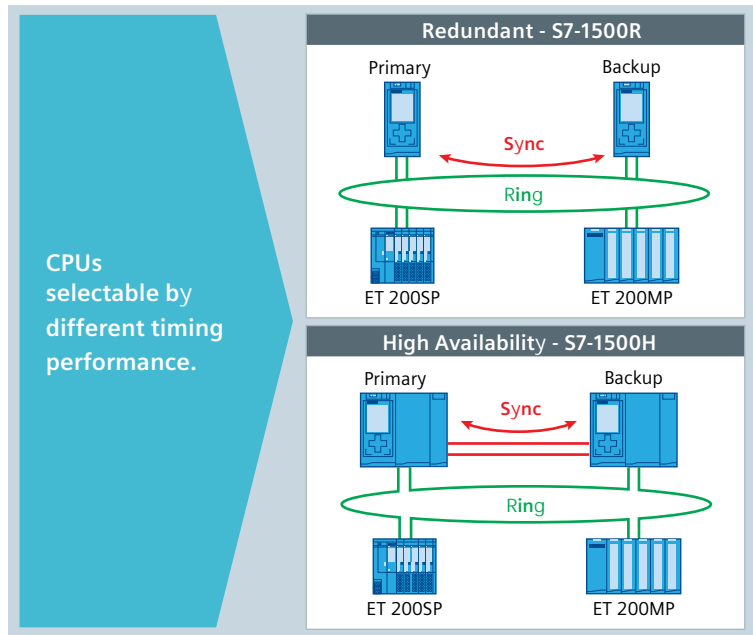
The redundant controllers SIMATIC S7-1500 R/H ensures high availability of production, prevents unscheduled downtime and eliminate data loss. In addition, they bring the efficient engineering of TIA Portal for critical applications.

[www.siemens.com/s7-1500](http://www.siemens.com/s7-1500)









**SIEMENS**

The series of CPUs for redundant and high availability applications has the simplicity of a standard SIMATIC S7-1500 system:

- Integrated control and visualization engineering of TIA Portal.
- The control application can be structured in different levels of execution.
- Switching CPUs has no negative impact on process.
- Automatic program and data synchronization. Application simplicity with two CPUs.
- Simple connection via Ethernet to other devices (ex. HMI, SCADA) with the system IP feature.



Controllers are divided into two types. The R CPUs are dedicated to systems in which transfer times are not critical, where the main need is to schedule maintenance or not lose data. The H CPUs are dedicated to situations that require high availability of process control and critical transfer times. There are four versions of CPUs, scalable for their performance:

CPU	1513R-1PN 6ES7513-1RM03-0AB0	1515R-2PN 6ES7515-2RN03-0AB0	1517H-3PN 6ES7517-3HP00-0AB0	1518HF-4 PN 6ES7518-4JP00-0AB0
				
Interfaces	X1 	X1 X2 	X1 X2 X3 X4 	X1 X2 X3 X4 X5 
Work Memory	600 KB	1 MB	2 MB	9 MB
Data memory (MB)	2,5	4,5	8	60
Bit-Performance (ns)	50	20	4	4
PN-IO	16 no ring; 64 total	16 no ring; 64 total	50 no ring; 256 total	50 no ring; 256 total
Width (mm)	35	70	175	175
Timing	Via Profinet Ring (MRP)		Dedicated synchronization module	
Changeover time	up to 200 ms		up to 50 ms	

### Main applications:



#### Tunnels

- Ventilation
- Extraction of smoke
- Lighting



#### Airports

- Transportation of luggage
- Storage



#### Subway systems



#### Warehouses

- Positioning



#### Datacenters

- Ventilation
- Air treatment
- Heating



#### Water treatment plants

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The information in this publication only contains descriptions or performance characteristics that will not always coincide with certain concrete application cases, or they may even vary depending on a possible continuation of product development. Performance characteristics will only be binding when there is a written adherence to the terms of the contract.