

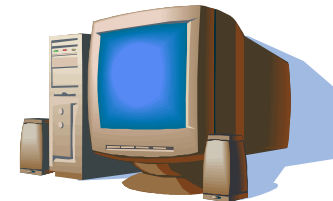
Nâng cấp hệ thống điều khiển

Sự lỗi thời của sản phẩm



Sự lỗi thời của sản phẩm là tình trạng của thiết bị không còn được nhà sản xuất cung cấp hoặc hỗ trợ dịch vụ

- Dòng sản phẩm mới thay thế
- Thay thế thuận lợi hơn việc bảo trì hoặc sửa chữa sản phẩm cũ
- Một số tính năng lỗi thời
- Không còn được sử dụng phổ biến



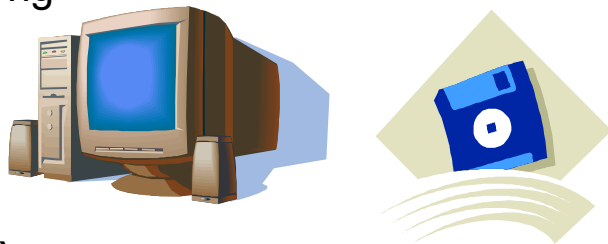
Các dạng lỗi thời trong hệ thống điều khiển

Kỹ năng

- Kỹ năng lập trình thiết kế
- Kỹ năng bảo trì bảo dưỡng
- Kỹ năng tối ưu hóa hệ thống

Sản phẩm lỗi thời

- Phần cứng



- Phần mềm



Symantec Endpoint Protection version 11.0.x will reach end of support life on January 5th, 2015

Vòng đời sản phẩm của Siemens



Các mốc vòng đời sản phẩm Siemens

Sản phẩm đang trong giai đoạn được phân phối (P.M 300)

Còn được sản xuất và phân phối trong ít nhất 12 năm.

Thông báo sản phẩm trong giai đoạn phaseout (P.M 400)

Được sản xuất và cung cấp dưới dạng hàng dự phòng trong 10 năm

Chấm dứt sản xuất (P.M 410)

Chỉ còn một vài sản phẩm đặc biệt được cung cấp dưới dạng hàng dự phòng

Chấm dứt cung cấp và hỗ trợ (P.M 490)

Product Life Cycle: Example : PCS 7 V7.1



Sales texts

SIMATIC PCS 7
ENGINEERING BASIC PACKAGE V7.1
CONSISTING OF:
1 X PCS 7 ENGINEERING V7.1
(AS/OS: PO 250)
1 X PDM PCS 7 V6.0 (128 TAGS)
1 X PCS 7 VISUALIZATION V7.1
1 X S7-PLCSIM V5.4
1 X PCS 7 AS 416-2



Sales texts

SIMATIC PCS7
INDUSTRIAL WORKSTATION IPC547C;
INTEL CORE 2 DUO E8400
(3.0 GHZ, 1333 MHZ FSB,
6MB L2 CACHE, EM64-T, VT),
ES/OS SINGLE STATION BCE
RAID1 (2 X 250 GB, HDD SATA);
INTERNALLY MOUNTED;
2.0 GB DDR2 SDRAM (2 X 1.0 GB);
DVD+RW, WITH FDD;
PCS7 V7.1 + SP3 PREINSTALLED;
UNIQUE IDENTIFICATION

Notes

Siemens Product Number has not been listed in PMD since | 2015.09.28 |
Product deleted without replacement

Thông tin vòng đời sản phẩm

Trên web:

<https://support.industry.siemens.com>

hoặc

Ứng dụng scan mã sản phẩm và hiển thị thông tin



SIEMENS
Ingenuity for life

INDUSTRY MALL

Industry Mall English Contact Us Help

> Home > Catalog > > Ordering Data Overview > 6ES74163XR050AB0

6ES74163XR050AB0 | 6ES74163XR050AB0



SIMATIC S7-400, CPU 416-3 Central processing unit with: Work memory 11.2 MB, (5.6 MB code, 5.6 MB data), 1st interface MPI/DP 12 Mbit/s, 2nd interface PROFIBUS DP, 3rd interface plug-in IFM module

Notes

For this product a substitute is available: [6ES7416-3XS07-0AB0](#)
> [6ES7416-3XS07-0AB0](#)

List Price > Show prices

Customer Price > Show prices

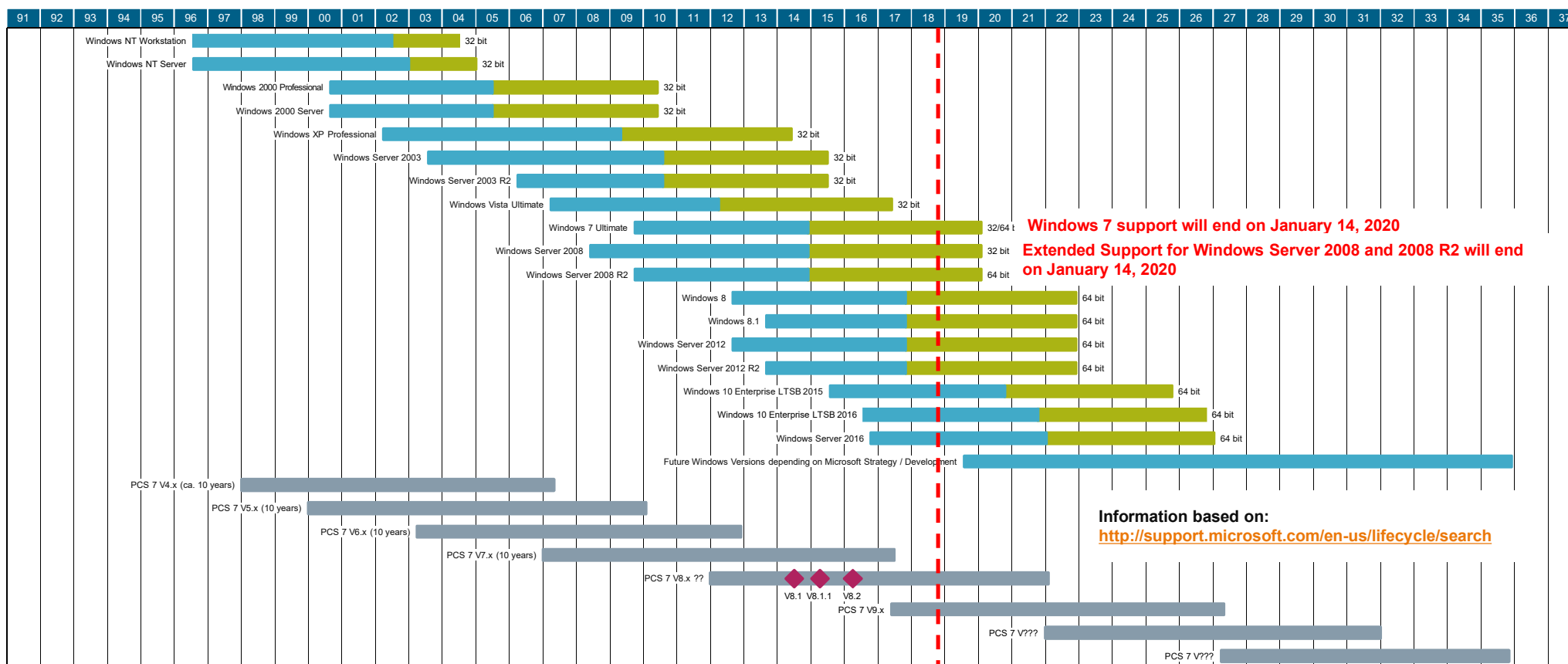
> Image gallery and data for M-CAD and E-CAD (4) (4)

Product data Further Product Information

Product

Article Number (Market Facing Number)	6ES74163XR050AB0 6ES74163XR050AB0
Product Description	SIMATIC S7-400, CPU 416-3 Central processing unit with: Work memory 11.2 MB, (5.6 MB code, 5.6 MB data), 1st interface MPI/DP 12 Mbit/s, 2nd interface PROFIBUS DP, 3rd interface plug-in IFM module
Product family	Not available
Product Lifecycle (PLM)	PM410: Product cancellation
PLM Effective Date	Product is cancelled since: 12/01/2016
Notes	For this product a substitute is available: 6ES7416-3XS07-0AB0 > 6ES7416-3XS07-0AB0

Vòng đời sản phẩm Microsoft Windows and SIMATIC PCS 7



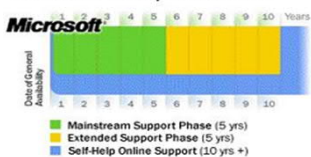
PCS 7 – Tính tương thích với các hệ điều hành

Microsoft Operating System	Version	PCS 7	PCS 7	PCS 7	PCS 7	PCS 7	PCS 7	PCS 7	PCS 7	PCS 7	PCS 7	PCS 7
		V9.0 SP1	V9.0	V8.2	V8.1	V8.1 SP1	V8.0	V8.0 SP2	V7.1	V7.1 SP4	V7.0	V7.0 SP3
Microsoft Windows 10	Enterprise LTSC 2015 (64-Bit)	√	√	√								
Microsoft Windows 7	Enterprise (32-Bit) SP1	√	√	√	√	√		√				
	Enterprise (64-Bit) SP1	√	√	√	√	√		√				
	Professional (64-Bit) SP1	√	√	√								
	Ultimate (32-Bit) SP1	√	√	√	√	√	√	√				
	Ultimate (64-Bit) SP1	√	√	√	√	√	√	√				
Microsoft Windows Server	2016 Standard (64-Bit)	√										
	2012 R2 Standard Edition (64-Bit) Upd	√	√	√								
	2008 R2 Standard Edition (64-Bit) SP1			√	√	√	√	√				
	2008 Standard Edition (32-Bit) SP2						√	√				
	2003 R2 Standard Edition (32-Bit) SP2						√	√	√	√		√
	2003 Standard Edition (32-Bit) SP2						√	√	√	√		√
	2003 Standard Edition (32-Bit) SP1										√	
Microsoft Windows XP	Professional (32-Bit) SP3						√	√	√	√		√
	Professional (32-Bit) SP2										√	

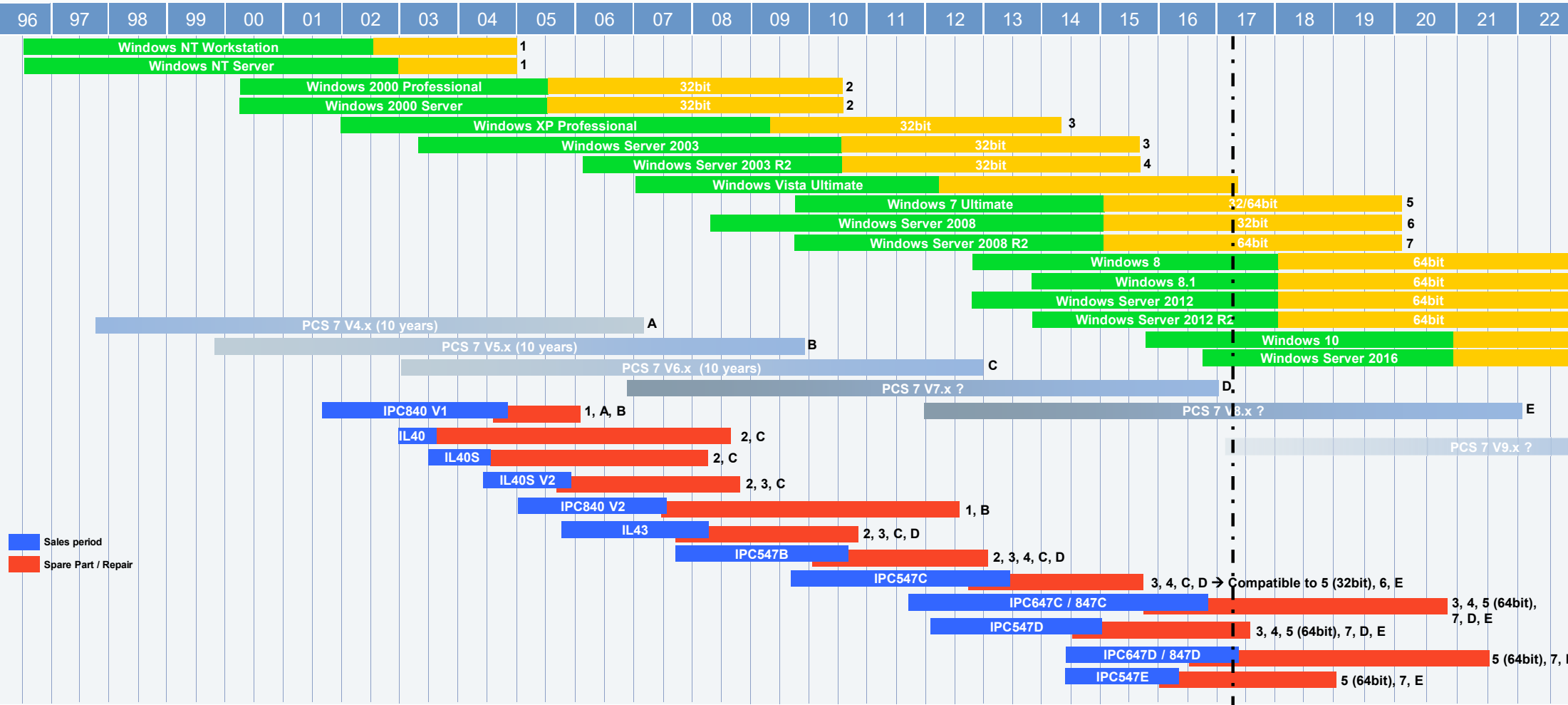
Windows / PCS 7 / RACK IPC

subject to change without notice

Business and Development software



IMENS
genuity for life



Sản phẩm với công nghệ mới

PROFINET – So sánh PROFIBUS and PROFINET

Cycle time



Transmission speed

Cycle time

Cable length

Number of Devices/Controller

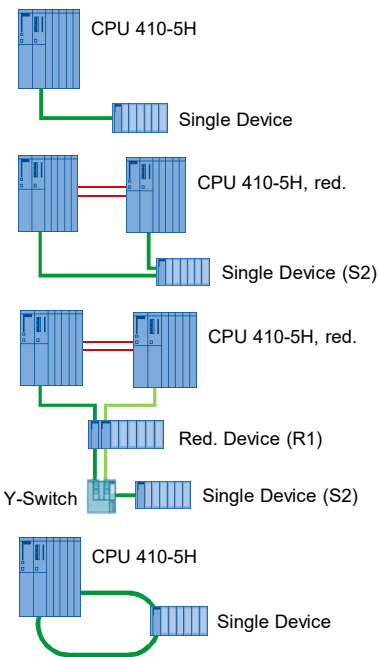
Consistent Data per Device

Addressing

PROFIBUS	PROFINET
12 MBit/s	100 MBit/s
Min. 300 µs	Min. 31.25 µs
>1000m (depending on baudrate)	Max. 100m copper; several kms w/ fibreoptic
125	250
244 Byte	1,440 Byte
Manually DIP- Switches or via telegram	Automatic by controller or manual by engineering system

PROFINET – Tính năng dự phòng và linh hoạt

Symbol	Description
	No System Redundancy Up to 250x Devices with Single PROFINET Interface¹
	Single PN Configuration with System Redundancy (S2) - Up to 250x Devices with Single PROFINET Interface¹ - Note: All Devices have to support S2
	Redundant PROFINET Configuration (R1) - Up to 64x Devices² with Redundant and Single PROFINET Interface¹ - Note: All Devices have to support R1 or S2 by using Y-Switch
	Electrical Ring Redundancy - Combinable with System Redundancy - Max 50x Devices; re-configuration time up to 200ms - Note: All Devices in the Ring have to support MRP
	Configuration in Run



PA ready

=

MRP

+

S2

+

CiR

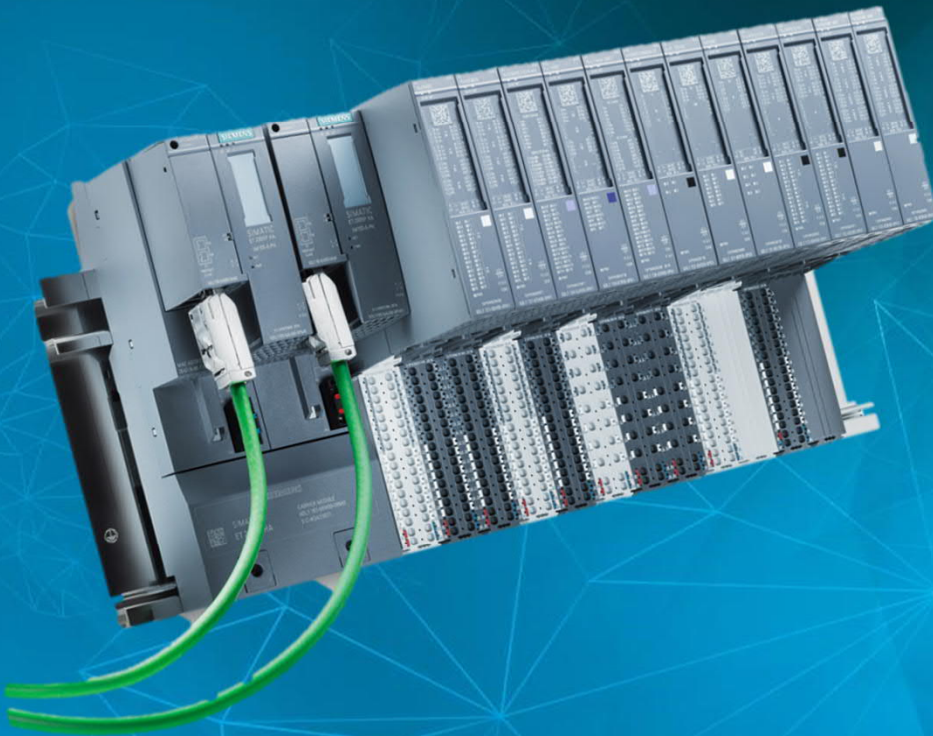
¹ Per CPU410-5H PROFINET interface; ² Release of up to 256 Devices planned

Unrestricted © Siemens AG 2018

SIMATIC ET 200SP HA

Các ưu điểm

SIEMENS
Ingenuity for life



Scalable redundancy on demand



- Single- or Redundant PROFINET Interface
- Single- or Redundant I/O modules with “built-in MTA”

Reduced & standard cabinet design



- Standard Terminal Blocks with Push-In technology
- Fixed wiring

Reduced system footprint by up to 50%



- Up to 32x channels in a 22,5mm wide housing
- Up to 56x modules per station

Ready for the field



- Installation up to Ex-Zone 2
- Temperature range: -40° to +70°C
- Conformal coating
- NE21 conform
- Applicable up to 4,000 m

SIMATIC PCS 7 CPU 410E / 410-5H

SIEMENS
Ingenuity for life



CPU 410E

Special offer for very small applications (200 POs)



CPU 410-5H

Scalable CPU for all applications



CPU 410SIS

Exclusive for SIMATIC SIS Compact



Khả năng của hệ thống

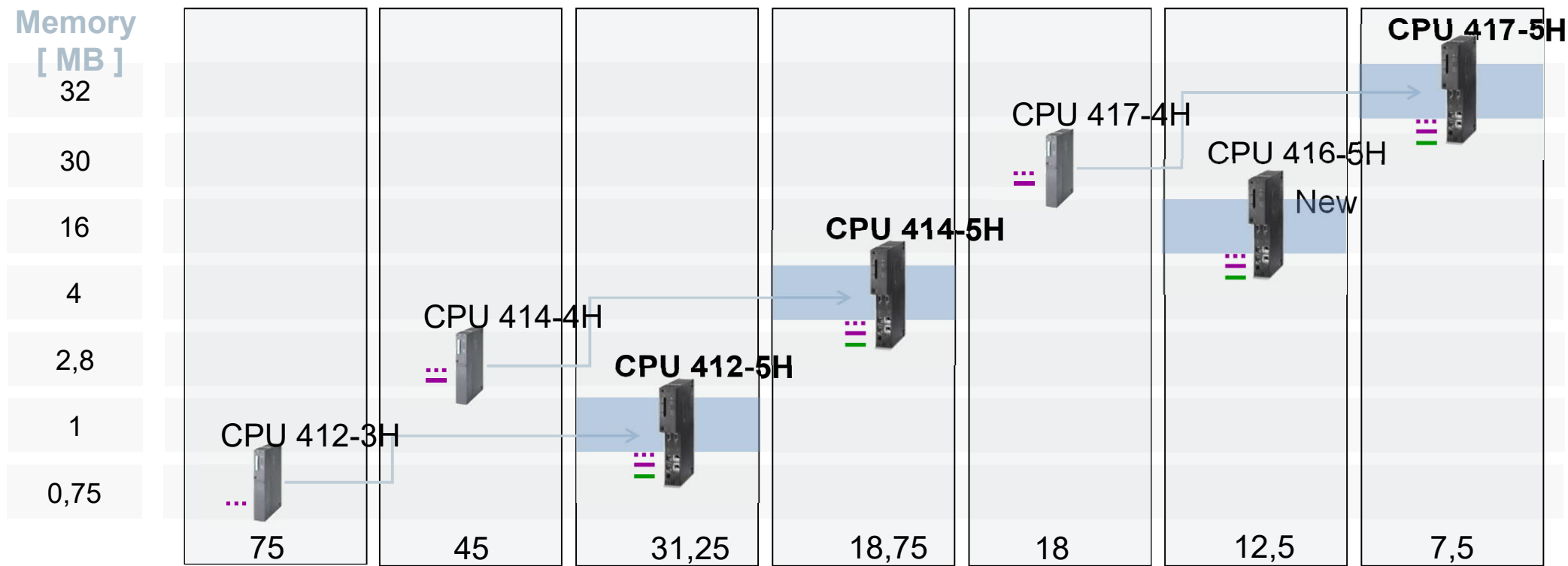
PCS 7 v7.0

OS quantity framework	
Max. number of OS servers / pairs of servers	12
Max. number of automation systems per OS server / pair of servers	64
Max. number of OS clients in multi-client mode ¹⁾ (per multi-user system)	32
Max. number of monitors per operator station with multi-channel operation	4
Max. number of OS areas	64
Max. number of windows per monitor	1 to 16 (adjustable)
Number of trends per trend window	10
Selection time for OS area display (100 process symbols)	< 2 s
Max. number of process objects:	
• Per OS single station	5000 POs
• Per OS server	8500 POs
Max. number of configurable messages per server/single station	150.000
Number of process tags	
• Per OS single station	Approx. 3000
• Per OS server	Approx. 5000
• Per multi-user system	Approx. 60000

PCS 7 v9.0

OS quantity framework	
Max. number of OS single stations	8
Max. number of OS servers/pairs of servers	18 
Max. number of automation systems per OS server/pair of servers	64
Max. number of OS clients in multi-client mode ¹⁾ , per multi-user system	40 
Max. number of monitors per operator station with multi-channel operation	4
Max. number of OS areas	64
Max. number of windows per monitor	1 to 16 (adjustable)
Number of trends per trend window	10
Selection time for OS area display (100 process symbols)	< 2 s
Max. number of configurable messages per server	200 000 
Max. number of configurable process objects	Approx. 216 000 
Max. number of configurable process tags	Approx. 128 000 ²⁾ 

Bộ điều khiển có dự phòng S7-400H



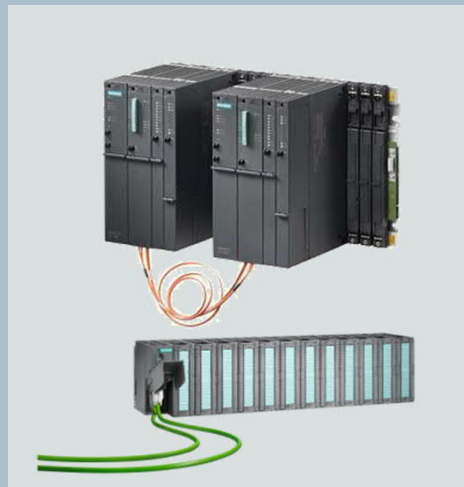
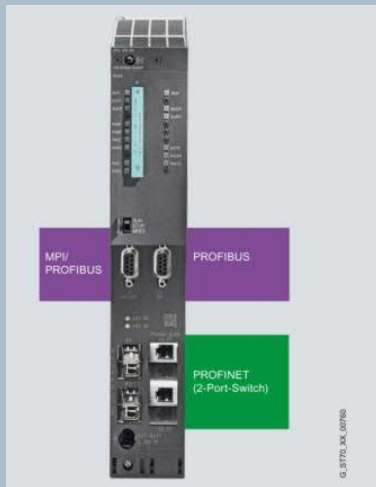
- ... MPI/DP
- DP
- PROFINET (2 port switch)

Performance in ns [bit-operation, word operation, fixed-word operation]

Unrestricted © Siemens AG 2018

Bộ điều khiển có dự phòng S7-400H ... với PROFINET

SIEMENS
Ingenuity for life



	CPU 412-5H	CPU 414-5H	CPU 416-5H	CPU 417-5H
Memory (Code/Data)	1MB 512kB/ 512kB	4MB 2MB/2MB	16MB 6MB/10MB	32MB 16MB/ 16MB
DP/MPI	1	1	1	1
DP	1	1	1	1
PN (incl. 2port-Switch)	1	1	1	1
Safety (optional)	✓	✓	✓	✓
Max. length for SyncCable	10 km	10 km	10 km	10 km

Controllers

- CPU 412-5H PN/DP (6ES7412-5HK06-0AB0)
- CPU 414-5H PN/DP (6ES7414-5HM06-0AB0)
- CPU 416-5H PN/DP (6ES7416-5HS06-0AB0)
- CPU 417-5H PN/DP (6ES7417-5HT06-0AB0)

IO - Level

- ET 200M with IM 153-4 PN (6ES7153-4BA00-0XB0)
- All existing standard analog und digital modules are useable
 - Approved assemblies are further used
- Easy integration of safety
 - Approved assemblies are further used

The background of the slide is a complex industrial scene, possibly a refinery or chemical plant, with large pipes, tanks, and machinery. Overlaid on this are various digital elements: a network of glowing blue lines representing data or process flow, floating blue cubes, and streams of binary code (0s and 1s) in a light blue color. In the top right corner, the Siemens logo is displayed in a white box.

SIEMENS
Ingenuity for life

Cảm ơn!

Unrestricted © Siemens AG 2018

<http://www.siemens.com/pcs7>

