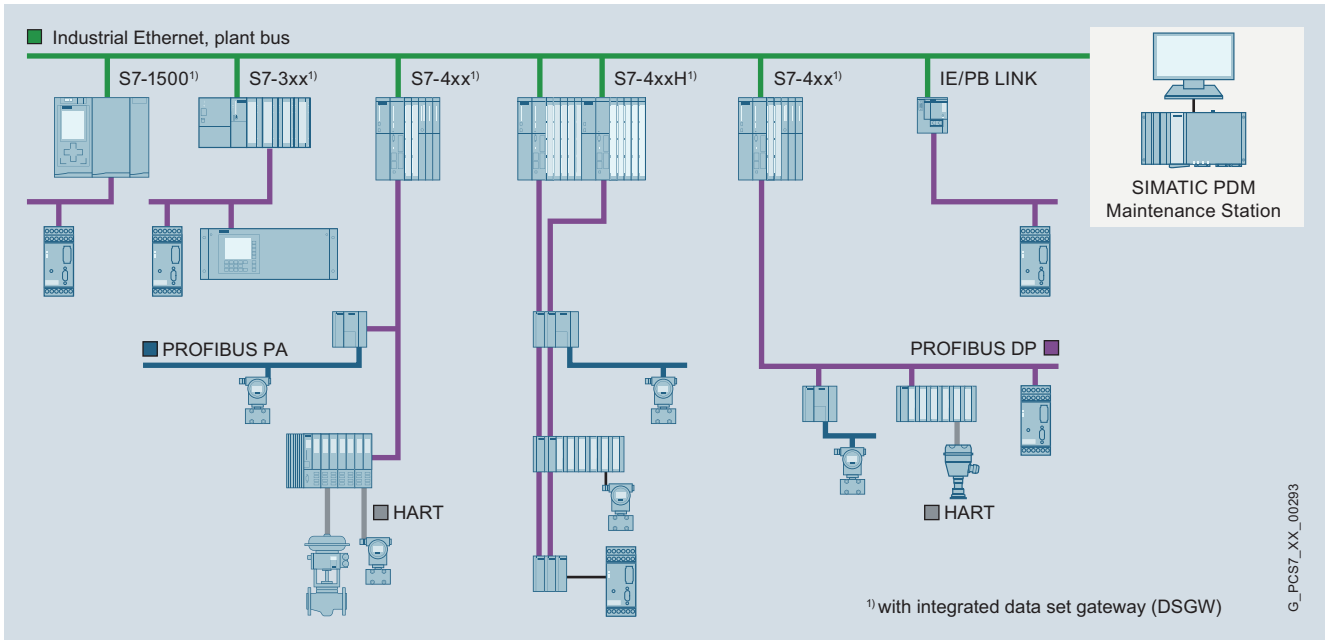


Overview



Integration of the system-independent SIMATIC PDM Maintenance Station in SIMATIC and SIMATIC PCS 7 with connection to the plant bus

In contrast to SIMATIC PCS 7 Maintenance Station, which is seamlessly integrated into the SIMATIC PCS 7 process control system, SIMATIC PDM Maintenance Station operates on separate hardware, independent of the automation projects and the employed automation systems (controllers). It integrates field devices and components via their Electronic Device Description and uses the communication paths of SIMATIC PDM to exchange information.

Note:

Device management and device integration functions based on SIMATIC PDM.

Application

The SIMATIC PDM Maintenance Station is suitable for all projects which use communication modes supported by SIMATIC PDM as well as all field devices described by an Electronic Device Description (EDD or FDI).

Field devices and field components that have been integrated into SIMATIC PDM via an EDD/FDI device description package can be monitored and diagnosed.

HART field devices and field components connected to HART multiplexers or communicating via wireless HART can also easily be monitored and evaluated in-situ.

SIMATIC PDM Maintenance Station is especially suited for the following tasks:

- The Maintenance Station is optimized for small to medium-sized service projects 500 devices per maintenance station
- Configuration of multiple maintenance stations in an automation project to handle additional devices 500 per MS
- Configuration of unit-granular maintenance stations or island solutions in up to 3 separate device groups
- Maintenance station retrofitting in SIMATIC S7/SIMATIC PCS 7 projects independent of the project version
- Implementation of maintenance stations in SIMATIC S7/SIMATIC PCS 7 projects without "Plant-wide data record routing" functionality
- Isolation between a technological or process based project and service or instrument based project
- Implementation of maintenance stations in projects without Siemens SIMATIC automation systems is easily handled with HART field devices and field components connected to HART multiplexers or communicating via wireless HART
- PDM MS can also easily interface via Profibus DP and via a coupler to Profibus PA, as well as Profinet. Modbus RTU via eVCON software and CM101 is also adaptable

Design



SIMATIC PDM Maintenance Station is based on the hardware of the Microbox SIMATIC IPC427E, equipped with a 240 GB SSD as a data storage medium. Due to its exceptional physical properties, it is suited for 24-hour continuous operation at temperatures from 0 to 50 °C.

Expansions/interfaces

SIMATIC PDM Maintenance Station provides the following:

- 4 USB interfaces (3.0, high current)
- 2 COM interfaces (RS 232/RS 485/RS 422, selectable)
- 2 DisplayPort graphics interfaces
- 3 Ethernet interfaces 10/100/1000 Mbps (RJ45)

It is supplied without input/output devices. In addition to mouse and keyboard, two other input/output devices can be externally connected via the provided USB ports, e.g. an optical drive (DVD-ROM/DVD±RW) or smart card reader USB.

Pre-installed software

The following software is factory installed on the SIMATIC PDM Maintenance Station:

- Operating system Windows 7 Ultimate 32-bit, MUI (English, German, French, Italian, Spanish, Chinese)
- SIMATIC IPC DiagMonitor diagnostics software
- Maintenance Station software:
 - SIMATIC PCS 7 V8.2 Software Selection
 - SIMATIC PDM V9.1.0.3 for stand-alone mode (Basic + 128 TAGs + Routing)
 - EDD device description library (Device Library) 01#2018
 - WinAC RTX 2010

Function

The SIMATIC PDM Maintenance Station is based on the SIMATIC PCS 7 Maintenance Station and the SIMATIC PDM Process Device Manager for stand-alone operation. The operator interfaces are comparable with those of the SIMATIC PCS 7 Maintenance Station, configured as single station. SIMATIC PDM integrates the intelligent field devices (sensors/actuators) and field components (remote I/Os, multiplexers, control room devices, compact controllers, etc.) via their Electronic Device Description (EDD or FDI). Export diagnostics data can be exported into XML files for further evaluation by systems in upper levels (e.g. MES, ERP)

For communication with field devices/components, SIMATIC PDM Maintenance Station uses the SIMATIC PDM communication paths over following communication interfaces:

- Industrial Ethernet
- PROFIBUS DP
- PROFIBUS PA
- PROFINET
- HART on PROFIBUS
- HART multiplexer via HART-IP WirelessHART
- WirelessHART via SITRANS AW200/SITRANS AW210
- Modbus

The diagnostic information is determined over a cyclic polling algorithm. The minimum polling cycle of the SIMATIC PDM Maintenance Station is 24 hours. There are 4 000 field devices on file. The max number of devices per PDM MS is 500 but they can be interlinked for larger projects.

Ordering data**Article No.****SIMATIC PDM Maintenance Station V3.0**

Based on SIMATIC IPC427E (Microbox)

Xeon E3-1505L processor,
4.0 GB DDR4 2400 SDRAM
(SO-DIMM module);
1 × 240 GB SDD SATA, internal;
3 × Ethernet IE/PN 10/100/
1000 Mbps;
4 × USB 3.0, high current,
standard rail mounting
without 3.5" floppy drive, optical
drive, mouse, keyboard and monitor

Windows 7 Ultimate 32-bit,
MUI (English, German, French,
Italian, Spanish, Chinese), SIMATIC
IPC DiagMonitor diagnostics soft-
ware and Maintenance Station soft-
ware pre-installed

With SIMATIC PDM Device Library
01/2018, licensing terms up to
500 objects, without SIMATIC PDM
TAG licenses

Goods delivery
Microbox, license key USB flash
drive, certificate of license

6ES7650-0RJ03-0YX0

Additional and expansion components**SIMATIC PDM TAGs**

TAG licenses for expanding the
available TAG volume, cumulative,
software class A, floating license for
1 user

- Goods delivery
License key on USB flash drive
and certificate of license
 - 10 TAGs
 - 100 TAGs
- Online delivery
License key download and
online certificate of license
Note: E-mail address required.
 - 10 TAGs
 - 100 TAGs

6ES7658-3XC00-2YB5
6ES7658-3XD00-2YB5

6ES7658-3XC00-2YH5
6ES7658-3XD00-2YH5

Keyboard/mouse**USB keyboard TKL-105**

Color: black

- Keyboard layout, German
- Keyboard layout, US International

6AV6881-0AU14-0AA0
6AV6881-0AU14-1AA0

SIMATIC HMI USB mouse

Optical mouse with scroll wheel and
USB connection, color anthracite

6AV2181-8AT00-0AX0