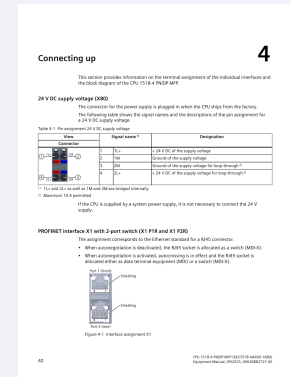


## FIELD INSTALLATION QUICK GUIDE

# Installation Instructions

Siemens 6ES7518-4AX00-1AC0

SIMATIC S7-1500 CPU 1518-4 PN/DP MFP Bundle



|          |                                             |
|----------|---------------------------------------------|
| PRODUCT  | 6ES7518-4AX00-1AC0                          |
| FAMILY   | SIMATIC S7-1500 MFP                         |
| FUNCTION | SIMATIC S7-1500 CPU 1518-4 PN/DP MFP Bundle |
| STATUS   | Verify exact configuration                  |

Prepared by Amikon Limited from Siemens DS 07/2025; MFP manual A5E40882737-AE 09/2025; system manual 11/2025. This guide does not replace the complete manufacturer manual, site procedure, hazardous-area drawing, or approval document.

## 01 CONFIRM THE ORDERED CONFIGURATION

|                                  |                                                 |
|----------------------------------|-------------------------------------------------|
| Program work memory              | 6 MB                                            |
| Data work memory                 | 60 MB                                           |
| Typical bit-operation time       | 1 ns                                            |
| CPU function-library memory      | 50 MB                                           |
| C/C++ Runtime application memory | 1024 MB                                         |
| SIMATIC Memory Card capacity     | Required; minimum 2 GB, maximum 32 GB           |
| Interface allocation             | X1 IRT; X2 RT; X3 basic services/runtime; X4 DP |

## 02 MOUNTING AND CONNECTION

- Qualified personnel must secure the machine, select STOP and isolate supply before wiring or removal.
- Fit the U connector and CPU on the S7-1500 rail; observe the system-manual fixing torque of 1.5 Nm.
- Use the MFP X80 assignment: 1L+ and 2L+ are +24 V; 1M and 2M are ground, with documented loop-through limits.
- Reconnect identified X1, X2, X3 and X4 cables; restore both CPU and C/C++ Runtime IP settings.
- Use a compatible SIMATIC Memory Card of at least 2 GB and retain the PLC/runtime backups.

## OFFICIAL INSTALLATION REFERENCE

### Connecting up

# 4

This section provides information on the terminal assignment of the individual interfaces and the block diagram of the CPU 1518-4 PN/DP MFP.

#### 24 V DC supply voltage (X80)

The connector for the power supply is plugged in when the CPU ships from the factory.

The following table shows the signal names and the descriptions of the pin assignment for a 24 V DC supply voltage.

Table 4-1 Pin assignment 24 V DC supply voltage

| View      | Signal name <sup>1)</sup> | Designation                                                    |
|-----------|---------------------------|----------------------------------------------------------------|
| Connector |                           |                                                                |
| ① 1L+     | 1 1L+                     | + 24 V DC of the supply voltage                                |
| ② 1M      | 2 1M                      | Ground of the supply voltage                                   |
| ③ 2M      | 3 2M                      | Ground of the supply voltage for loop-through <sup>2)</sup>    |
| ④ 2L+     | 4 2L+                     | + 24 V DC of the supply voltage for loop-through <sup>2)</sup> |

<sup>1)</sup> 1L+ and 2L+ as well as 1M and 2M are bridged internally.

<sup>2)</sup> Maximum 10 A permitted

If the CPU is supplied by a system power supply, it is not necessary to connect the 24 V supply.

#### PROFINET interface X1 with 2-port switch (X1 P1R and X1 P2R)

The assignment corresponds to the Ethernet standard for a RJ45 connector.

- When autonegotiation is deactivated, the RJ45 socket is allocated as a switch (MDI-X).
- When autonegotiation is activated, autocrossing is in effect and the RJ45 socket is allocated either as data terminal equipment (MDI) or a switch (MDI-X).

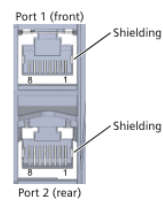


Figure 4-1 Interface assignment X1

## 04

## CABLE ROUTING AND CONNECTION

- Fit the U connector and CPU on the S7-1500 rail; observe the system-manual fixing torque of 1.5 Nm.
- Use the MFP X80 assignment: 1L+ and 2L+ are +24 V; 1M and 2M are ground, with documented loop-through limits.
- Reconnect identified X1, X2, X3 and X4 cables; restore both CPU and C/C++ Runtime IP settings.
- Use a compatible SIMATIC Memory Card of at least 2 GB and retain the PLC/runtime backups.
- Validate approved software, runtime access and device communication before restarting the machine.

## 05

## INITIAL SYSTEM CHECKS

- Confirm model identity and compatible system components before energizing.
- Verify wiring, grounding, enclosure, and applicable hazardous-area requirements.
- Verify the STEP 7 application, C/C++ Runtime and assigned network connections before release.
- Record the installed order number and baseline operating condition.

## 06

## CONTROLLED DOCUMENTS

|                 |                                                                              |
|-----------------|------------------------------------------------------------------------------|
| Official source | Siemens DS 07/2025; MFP manual A5E40882737-AE 09/2025; system manual 11/2025 |
| Product record  | 6ES7518-4AX00-1AC0                                                           |
| Manufacturer    | Siemens                                                                      |
| Support         | INFO@AMIKON.CN                                                               |