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Replacing the OLM with SCALANCE

PCS 7 V9.0, Optical Link Module, SCALANCE

<https://support.industry.siemens.com/cs/ww/en/view/109754843>

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1 Overview

Note

The following lists do not cover all applications. The lists are simply examples for possible alternatives to the SCALANCEs named on the entry page.

Generally, the following must be given when changing from OLM to SCALANCE:

- The connector has to match the cable.
- The connector has to match the module.
- The cable must be able to be used on the module, in other words the optical transceiver has to support the fiber optic cable.
- The termination kit has to match the connector and cable.

	P11 P12 P22	G11	G12 G12-EEC G22	G11-1300	G12-1300
PCF FO	Chapter 2				
POF FO	Chapter 3				
Glass FO 50/125 µm		Chapter 4	Chapter 5		
Glass FO 62.5/125 µm		Chapter 6	Chapter 7		
Glass FO 10/125 µm				Chapter 8	Chapter 9

Note

The specified maximum line length refers to the maximum possible line length supported by SCALANCE. The maximum line length is also limited by the cable used and has to be checked accordingly.

Explanation of the lists



Supports the PA ready function, no change of connector necessary

Supports the PA ready function, change of connector necessary

Does not support the PA ready function, no change of connector necessary

Does not support the PA ready function, change of connector necessary

Note

Further information about the overview of the functions of PROFINET devices is available in the FAQ response entitled "Function Overview of PROFINET Devices in SIMATIC PCS 7 V9.0" at the following link:

<https://support.industry.siemens.com/cs/ww/en/view/109747976>

2 OLM P11, P12 and P22 with PCF FO

The following table includes a list of possible SCALANCEs that can replace the OLMs P11, P12, P22 using the PCF FO cable type without having to replace the fiber optic cables.

Note

With the SCALANCE products named in this chapter it is necessary to change the connector from BFOC to SC RJ. Further information about the connectors and termination kits is available in the FAQ response entitled "Which connector do you use to connect fiber-optic cables to the optical interface of network components and terminals?" at the following link:

<https://support.industry.siemens.com/cs/ww/en/view/35146578>

SCALANCE	Article number	Max. length
XF204-2BA with bus adapter BA SCRJ/RJ45	6GK5204-2AA00-2GF2 6ES7193-6AP20-0AA0	100 m
XF204-2BA with bus adapter BA SCRJ/FC	6GK5204-2AA00-2GF2 6ES7193-6AP40-0AA0	100 m
XF204-2BA DNA with bus adapter BA SCRJ/RJ45	6GK5204-2AA00-2YF2 6ES7193-6AP20-0AA0	100 m
XF204-2BA DNA with bus adapter BA SCRJ/FC	6GK5204-2AA00-2YF2 6ES7193-6AP40-0AA0	100 m
X200-4P IRT	6GK5200-4AH00-2BA3	100 m
X201-3P IRT	6GK5201-3BH00-2BA3	100 m
X201-3P IRT PRO	6GK5201-3JR00-2BA6	100 m
X202-2P IRT	6GK5202-2BH00-2BA3	100 m
X202-2P IRT PRO	6GK5202-2JR00-2BA6	100 m

3 OLM P11, P12 and P22 with POF FO

3 OLM P11, P12 and P22 with POF FO

The following table includes a list of possible SCALANCEs that can replace the OLMs P11, P12, P22 using the POF FO cable type without having to replace the fiber optic cables.

Note

With the SCALANCE products named in this chapter it is necessary to change the connector from BFOC to SC RJ. Further information about the connectors and termination kits is available in the FAQ response entitled "Which connector do you use to connect fiber-optic cables to the optical interface of network components and terminals?" at the following link:

<https://support.industry.siemens.com/cs/ww/en/view/35146578>

SCALANCE	Article number	Max. length
XF204-2BA with bus adapter BA SCRJ/RJ45	6GK5204-2AA00-2GF2 6ES7193-6AP20-0AA0	50 m
XF204-2BA with bus adapter BA SCRJ/FC	6GK5204-2AA00-2GF2 6ES7193-6AP40-0AA0	50 m
XF204-2BA DNA with bus adapter BA SCRJ/RJ45	6GK5204-2AA00-2YF2 6ES7193-6AP20-0AA0	50 m
XF204-2BA DNA with bus adapter BA SCRJ/FC	6GK5204-2AA00-2YF2 6ES7193-6AP40-0AA0	50 m
X200-4P IRT	6GK5200-4AH00-2BA3	50 m
X201-3P IRT	6GK5201-3BH00-2BA3	50 m
X201-3P IRT PRO	6GK5201-3JR00-2BA6	50 m
X202-2P IRT	6GK5202-2BH00-2BA3	50 m
X202-2P IRT PRO	6GK5202-2JR00-2BA6	50 m

4 OLM G11 with Glass FO 50/125 µm

4 OLM G11 with Glass FO 50/125 µm

The following table includes a list of possible SCALANCEs that can replace the OLM G11 using the cable type glass FO 50/125 µm without having to replace the fiber optic cables.

SCALANCE	Article number	Max. length
XC206-2 (ST/BFOC)	6GK5206-2BB00-2AC2	5 km
XF204-2	6GK5204-2BC00-2AF2	5 km
X202-2IRT	6GK5202-2BB00-2BA3	5 km
XM408-4C with pluggable transceiver STP991-1	6GK5408-4GP00-2AM2 6GK5991-1AB00-8AA0	5 km

5 OLM G12 and G22 with Glass FO 50/125 µm

The following table includes a list of possible SCALANCEs that can replace the OLMs G12, G12, and G12-EEC using the cable type glass FO 50/125 µm without having to replace the fiber optic cables.

SCALANCE	Article number	Max. length
XC206-2 (ST/BFOC)	6GK5206-2BB00-2AC2	5 km
XF204-2	6GK5204-2BC00-2AF2	5 km
X202-2IRT	6GK5202-2BB00-2BA3	5 km
XM408-4C with 2x pluggable transceivers STP991-1	6GK5408-4GP00-2AM2 6GK5991-1AB00-8AA0	5 km

6 OLM G11 with Glass FO 62.5/125 µm

6 OLM G11 with Glass FO 62.5/125 µm

The following table includes a list of possible SCALANCEs that can replace the OLM G11 using the cable type glass FO 62.5/125 µm without having to replace the fiber optic cables.

SCALANCE	Article number	Max. length
XC206-2 (ST/BFOC)	6GK5206-2BB00-2AC2	4 km
XF204-2	6GK5204-2BC00-2AF2	4 km
X202-2IRT	6GK5202-2BB00-2BA3	4 km
XM408-4C with pluggable transceiver STP991-1	6GK5408-4GP00-2AM2 6GK5991-1AB00-8AA0	4 km

7 OLM G12 and G22 with Glass FO 62.5/125 µm

The following table includes a list of possible SCALANCEs that can replace the OLMs G12, G12, and G12-EEC using the cable type glass FO 62.5/125 µm without having to replace the fiber optic cables.

SCALANCE	Article number	Max. length
XC206-2 (ST/BFOC)	6GK5206-2BB00-2AC2	4 km
XF204-2	6GK5204-2BC00-2AF2	4 km
X202-2IRT	6GK5202-2BB00-2BA3	4 km
XM408-4C with 2x pluggable transceivers STP991-1	6GK5408-4GP00-2AM2 6GK5991-1AB00-8AA0	4 km

8 OLM G11 with Glass FO 10/125 µm

The following table includes a list of possible SCALANCEs that can replace the OLM G11-1300 using the cable type glass FO 10/125 µm without having to replace the fiber optic cables.

Note With the SCALANCE products named in this chapter it is necessary to change the connector from BFOC to LC. Further information about the connectors and termination kits is available in the FAQ response entitled "Which connector do you use to connect fiber-optic cables to the optical interface of network components and terminals?" at the following link:
<https://support.industry.siemens.com/cs/ww/en/view/35146578>

SCALANCE	Article number	Max. length
XC206-2SFP with SFP991-1LD	6GK5206-2BS00-2AC2 6GK5991-1AF00-8AA0	26 km
XC206-2SFP with SFP991-1LH+	6GK5206-2BS00-2AC2 6GK5991-1AE00-8AA0	70 km
XC206-2SFP with SFP991-1ELH200	6GK5206-2BS00-2AC2 6GK5991-1AE30-8AA0	200 km
XC206-2SFP with SFP992-1LD	6GK5206-2BS00-2AC2 6GK5992-1AM00-8AA0	10 km
XC206-2SFP with SFP992-1LH	6GK5206-2BS00-2AC2 6GK5992-1AN00-8AA0	40 km
XC206-2SFP with SFP992-1LH+	6GK5206-2BS00-2AC2 6GK5992-1AP00-8AA0	70 km
XC206-2SFP with SFP992-1ELH	6GK5206-2BS00-2AC2 6GK5992-1AQ00-8AA0	120 km

9 OLM G12-1300 with Glass FO 10/125 µm

The following table includes a list of possible SCALANCEs that can replace the OLM G12-1300 using the cable type glass FO 10/125 µm without having to replace the fiber optic cables.

Note

With the SCALANCE products named in this chapter it is necessary to change the connector from BFOC to LC. Further information about the connectors and termination kits is available in the FAQ response entitled "Which connector do you use to connect fiber-optic cables to the optical interface of network components and terminals?" at the following link:

<https://support.industry.siemens.com/cs/ww/en/view/35146578>

SCALANCE	Article number	Max. length
XC206-2SFP with 2x SFP991-1LD	6GK5206-2BS00-2AC2 6GK5991-1AF00-8AA0	26 km
XC206-2SFP with 2x SFP991-1LH+	6GK5206-2BS00-2AC2 6GK5991-1AE00-8AA0	70 km
XC206-2SFP with 2x SFP991-1ELH200	6GK5206-2BS00-2AC2 6GK5991-1AE30-8AA0	200 km
XC206-2SFP with 2x SFP992-1LD	6GK5206-2BS00-2AC2 6GK5992-1AM00-8AA0	10 km
XC206-2SFP with 2x SFP992-1LH	6GK5206-2BS00-2AC2 6GK5992-1AN00-8AA0	40 km
XC206-2SFP with 2x SFP992-1LH+	6GK5206-2BS00-2AC2 6GK5992-1AP00-8AA0	70 km
XC206-2SFP with 2x SFP992-1ELH	6GK5206-2BS00-2AC2 6GK5992-1AQ00-8AA0	120 km