solaredge

Technical Note

Compatibility of Three-Phase Inverters and Optimizers in North America

Version 1.1 April 2025 MAN-01-01258-1.1

Revision History

Version	Date	Description
1.1	April 2025	General updates
1.0	August 2024	Initial release

Overview

SolarEdge is releasing a new series of high-power DC optimizers that deliver higher output currents than existing models with the introduction of a corresponding series of inverters to support this increased current, designed without fuses on the DC input. These new optimizers and inverters are compatible only with each other and are not interchangeable with devices from previous generations.

The following table displays new optimizers with a maximum output current level of 24A, compared to previous generations of optimizers with a maximum output of 18A:

Power optimizers maximum DC current

Power Optimizer model	Maximum DC output current
P860, P960, P1100/1	18A
S1200/1	18A
C651U	24A

System compatibility

Superseded part numbers

Inverters			Power Optimizers		
Туре	Input type	Inverter PN	Model	P860/P960 P1100/1 S1200/1	C651U
Three Phase Inverter	Multi DC input (fuse- less)	SExxK- USxxIxxZ4	SE10KUS SE17.3KUS SE30KUS SE40KUS	COMPATIBLE	NOT COMPATIBLE
Three Phase Inverter with	Multi DC input (fuse- less)	SExxK- USxxIxxZ4	SE50KUS SE80KUS SE100KUS SE110KUS SE120KUS	COMPATIBLE	NOT COMPATIBLE
Synergy Manager	1 DC input (fuse- less)	SExxK- USxxIxxW4			

Three Phase Inverter with Synergy Manager

Synergy Manager	Synergy Unit
SExxK-USxxIxxx4	SESUK-USROINNN4

New inverter part numbers

Inverters			ters Power Optimizers		rs
Туре	Input type	Inverter PN	Model	P860/P960 P1100/1 S1200/1	C651U
Three Phase Inverter	Multi DC input (fuse- less)	xSE-SIN- USR0IBNS8	SE10KUS SE17.3KUS SE30KUS SE40KUS	NOT COMPATIBLE	COMPATIBLE
Three Phase Inverter with Synergy	Multi DC input (fuse- less)	SE-DBL- US00IBNS4 SE-TRI- US00IBNS4	SE50KUS SE80KUS SE100KUS SE110KUS SE120KUS		
Manager	1 DC input (fuse- less)	SE-TRI- US00IBNW4			

Synergy Manager and Synergy Unit compatibility for new PNs

Synergy Manager	Synergy Unit
SE-TRI-US00IBNS4	xSESUK-USR0INNN6/8
SE-TRI-US001BNW4	
SE-DBL-US00IBNS4	

Summary

C651U optimizers are exclusively compatible with fuse-less inverters that have one of the following part number structures:

- xSE-SIN-USxxIxxSx
- SE-DBL-USxxIxxSx
- SE-TRI-USxxIxxSx
- SE-TRI-USxxIxxWx



NOTE

The new Synergy Managers and Synergy Units are NOT compatible with the previous Synergy Managers and Synergy Units.