



# Manufacturer's Declaration

## To Whom It May Concern:

According to the latest EN50549-1:2019 document:

- Latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2019-08-01
- Latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2022-02-01
- This document supersedes EN50438:2013 and CLC/TS 50549-1:2015

Solis inverters have already integrated the EN50549-1:2019 standard settings inside all latest inverters. For any European countries which still require the old EN50438:2013 standard, Solis recommends the following alternative.

Unless specially noted, enter the following path to set the grid standard as "EN50549L"

### Advanced Setting – Select Standard – "EN50549L"

The "EN50549L" fully complies with the EN50549-1:2019 standard with following default protection limits. Meanwhile, customers can modify those parameters in the range as indicated in the brackets.

	Voltage	Time		Frequency	Time
1 <sup>st</sup> Level Overvoltage	276V (230V~276V)	5s (0.1s~100s)	1 <sup>st</sup> Level Overfreq	51.5Hz (50Hz~52Hz)	0.5s (0.1s~100s)
2 <sup>nd</sup> Level Overvoltage	287.5V (230V~299V)	0.1s (0.1s~5s)	2 <sup>nd</sup> Level Overfreq	52Hz (50Hz~52Hz)	0.1s (0.1s~5s)
1 <sup>st</sup> Level Undervoltage	184V (46V~230V)	3s (0.1s~100s)	1 <sup>st</sup> Level Underfreq	47.5Hz (47Hz~50Hz)	0.5s (0.1s~100s)
2 <sup>nd</sup> Level Undervoltage	92V (46V~230V)	1.5s (0.1s~5s)	2 <sup>nd</sup> Level Underfreq	47Hz (47Hz~50Hz)	0.1s (0.1s~5s)

	Default High	Default Low	High Range	Low Range
Reconnection Voltage	253V	195.5V	230V~276V	115V~230V
Reconnection Frequency	50.2Hz	49.5Hz	50Hz~52Hz	47Hz~50Hz
Startup Voltage	253V	195.5V	230V~276V	115V~230V
Startup Frequency	50.1Hz	49.5Hz	50Hz~52Hz	47Hz~50Hz
Startup Time	60s (10s~600s)			
Reconnection Time	60s (10s~600s)			
Loss of Main (Max Disconnection Time)	Actual Time <1s, EN50549 requires < 2s			



In Ireland, if EN50438 is still required by the network operator. Customer can modify the EN50549L settings as below to satisfy the EN50438 requirements for Ireland.

Solis confirms all Solis products have been achieved and processed to the fullness examination according to EN50438:2013 for Ireland with below settings modified.

	Voltage	Time		Frequency	Time
1 <sup>st</sup> Level Overvoltage	253V	0.4s	1 <sup>st</sup> Level Overfreq	50.5Hz	0.3s
2 <sup>nd</sup> Level Overvoltage	253V	0.4s	2 <sup>nd</sup> Level Overfreq	50.5Hz	0.3s
1 <sup>st</sup> Level Undervoltage	207V	0.4s	1 <sup>st</sup> Level Underfreq	48Hz	0.3s
2 <sup>nd</sup> Level Undervoltage	207V	0.4s	2 <sup>nd</sup> Level Underfreq	48Hz	0.3s

	High	Low
Reconnection Voltage	253V	207V
Reconnection Frequency	50.5Hz	48Hz
Startup Voltage	253V	207V
Startup Frequency	50.5Hz	48Hz
Startup Time	60s	
Reconnection Time	60s	
Loss of Main (Max Disconnection Time)	Actual Time <1s, EN50438 requires < 1s	

Manufacture Stamp

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Date and Place

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