

Technical Note Note Technique

SolarEdge Inverter Impedance at 175Hz Impédance à 175Hz pour les onduleurs SolarEdge

Version 1.5

December 2024

Revision History

Version	Date	Description
1.5	December 2024	Added SE20K values to table
1.4	June 2021	Updated impedance values for three phase inverters
1.3	November 2020	Three phase inverter rating modifications

English

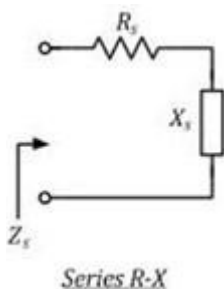
This document provides the impedance values at 175Hz [R,X] of SolarEdge inverters. It applies to inverters installed in France.

These impedance values are required to confirm compatibility of the grid signal and the inverters due to grid operator use of a ripple control signal method based on 175Hz to evaluate feed-in tariff adjustments.

Français

Le but de ce document est de fournir les valeurs d'impédance à 175Hz [R, X] des onduleurs SolarEdge. Appliqué à PV systèmes en France.

La valeur de l'impédance à 175Hz est nécessaire pour confirmer la compatibilité du réseau et des onduleurs du fait que les opérateurs de réseau utilisent une méthode de signal de commande d'ondulation basée sur une fréquence de 175Hz pour évaluer les ajustements des tarifs de rachat.



Single Phase Inverters with HD-Wave Technology

Inverter Model / Modele Onduleur	AC Power [kVA] / Puissance AC [kVA]	R175 Hz	X175 Hz
SE6000H	6000	1.10 Ω	-21.69 Ω

Inverter Model / Modele Onduleur	AC Power [kVA] / Puissance AC [kVA]	R175 Hz	X175 Hz
SE5000H	5000	1.95 Ω	-21.07 Ω
SE4000H	4000	1.73 Ω	-21.90 Ω
SE3680H	3680	-1.50 Ω	-20.74 Ω
SE3500H	3500	-1.09 Ω	-20.55 Ω
SE3000H	3000	-1.44 Ω	-20.38 Ω
SE2200H	2200	-1.04 Ω	-21.12 Ω

Three Phase Inverters

Inverter Model / Modele Onduleur	AC Power [kVA] / Puissance AC [kVA]	R175 Hz	X175 Hz
SE120K	120	0.98 Ω	-2.95 Ω
SE100K	100	0.98 Ω	-2.95 Ω
SE90K	90	0.97 Ω	-2.94 Ω
SE82.8K	82.8	0.97 Ω	-2.94 Ω
SE66.6K	66.6	1.47 Ω	-4.43 Ω
SE55K	55	1.46 Ω	-4.42 Ω
SE50K	50	2.75 Ω	-4.42 Ω
SE33.3K	33.3	2.94 Ω	-8.87 Ω
SE30K	30	2.92 Ω	-8.82 Ω
SE27.6K	27.6	2.93 Ω	-8.84 Ω
SE25K	25	5.5 Ω	-8.84 Ω
SE20K	20	2.94 Ω	-9.84 Ω
SE17K	17	5 Ω	-14.5 Ω
SE16K	16	5 Ω	-14.5 Ω
SE15K	15	5 Ω	-14.5 Ω
SE12.5K	12.5	4.725 Ω	-14.95 Ω
SE10K	10	4.4 Ω	-15.3 Ω

Inverter Model / Modele Onduleur	AC Power [kVA] / Puissance AC [kVA]	R175 Hz	X175 Hz
SE9K	9	4.2 Ω	-15.7 Ω
SE8K	8	4 Ω	-16.1 Ω
SE7K	7	3.75 Ω	-16.6 Ω
SE6K	6	3.5 Ω	-17.1 Ω
SE5K	5	3.25 Ω	-17.85 Ω
SE4K	4	3 Ω	-18.6 Ω

Support Contact Information

If you have technical problems concerning SolarEdge products, please contact us:



<https://www.solaredge.com/service/support>

Before contact, make sure to have the following information at hand:

- Model and serial number of the product in question.
- The error indicated on the product SetApp mobile application LCD screen or on the monitoring platform or by the LEDs, if there is such an indication.
- System configuration information, including the type and number of modules connected and the number and length of strings.
- The communication method to the SolarEdge server, if the site is connected.
- The product's software version as it appears in the ID status screen.