

RI-TS-175 Series



Micro-Grid Control System

Product Description

The RI-TS-175 Series of micro-grid controllers is compatible with the RI-ENERGYSET-3P-ESS-125-261 series.

- Seamless switching between on-grid and off-grid modes, switching time <20ms
- ESS, PV and DG cooperation, smoothly switch between on-grid, off-grid and DG modes
- Modular design, supports parallel connection, flexible capacity expansion
- Built-in data collection module and high accuracy meter

Specifications

	RI-TS-175-G/D (Grid/DG)	RI-TS-175-G (Grid)	RI-TS-175-D (DG)
Grid			
AC Voltage Range [V]	400 ±10%	400 ±10%	-
Rated Current [A]	250	250	-
Max. Input Power [kW]	175	175	-
Automatic Switch Time [ms]	< 20	< 20	-
DG			
AC Voltage Range [V]	400 ±10%	-	400 ±10%
Rated Current [A]	250	-	250
Max. Input Power [kW]	175	-	175
Automatic Switch Time [ms]	< 20 [*1]	-	< 20 [*1]
ESS			
Rated AC Power [kW]	125	125	125
Nominal Energy [kWh]	261	261	261
Rated AC Voltage [V]	400, 3L / N / PE	400, 3L / N / PE	400, 3L / N / PE
Rated AC Current [A]	180	180	180
Rated Charging / Discharging Power [kW]	125 [*2]	125 [*2]	-
PV access (optional) [kW]	≤ 125	≤ 125	-
Load			
Rated AC Power [kW]	125	125	125
Rated AC Voltage [V]	400, 3L / N / PE	400, 3L / N / PE	400, 3L / N / PE
Rated AC Current [A]	180	180	180
General Specifications			
Electrical Durability	20000	20000	20000
Mechanical Durability	20000	20000	20000
Application Type	Interlock	Single	Single
Isolated Break Point	Yes	Yes	Yes
AC Surge Protection	Type II	Type II	Type II
Auxiliary power supply	Grid & ESS Dual Path, 24Vdc	Grid & ESS Dual Path, 24Vdc	DG & ESS Dual Path, 24Vdc
Communication protocol	Modbus, RS485		
Grid Connection Form	3L / N / PE		
Ingress Protection	IP54		
Ambient Temperature Range [°C]	-30...50		
Relative Humidity	≤ 95%		
Operation Altitude [m]	4000 (> 2000 Derating)		
Housing			
Dimensions (W x H x D) [mm]	400 x 2310 x 1400		
Environmental Category	Outdoor		
Installation	Floor-Mounted		
Cable Inlet and Outlet	Bottom		

[*1]: Warm up DG in advance. [*2]: When the load is working at full power(125kW), the maximum charging power on ESS side is 50kW.

Model Selection Table

Description	Model
Call for Details	RI-ENERGYSET-3P-ESS-125-261