Definition of Parameter Settings in APP (ESS LINK)

This document is an explanation of each parameter setting item in ESS LINK. When you encounter problems setting parameters in the APP, please check this document.

Setting Description	Definition	Suggested setting Yes/No	When/Why to set with "Suggested Setting" /Remark
General Settings(Settings for installers)			
Powered On/Off	turn on/off inverter	No	
Date	Same as the user's local date	No	
Working Mode	Select the current working mode of inverter	Yes	When switching the inverter working mode
Charge Time Period	Battery charging time period	Yes	When the working mode is battery charging and discharging
Charging power	Battery charging power	Yes	When the working mode is battery charging and discharging
Discharging Time Period	Battery discharging time period	Yes	When the working mode is battery charging and discharging
Discharging power	Battery discharging power	Yes	When the working mode is battery charging and discharging
Other period modes	Working mode during non-charging/discharging period	Yes	This item must be set
Repetitive weeks	Days of wish to work per week	Yes	This item must be set
Effective date	Date range you wish to work	Yes	This item must be set

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Fault Clearing	Clear the fault reported by inverter and perform self-test	Yes	When the inverter reports a fault
Batt min soc	Battery stops discharging value when off-grid	Yes	Set according to usage
Batt backup soc	Battery stops discharging value when on-grid	Yes	Set according to usage

Definition of Advanced Parameter Settings in APP (ESS LINK)

Setting Description	Definition	Suggested setting Yes/No	When/Why to set with "Suggested Setting" /Remark
Master Settings-Routine(Settings for installers)			
Anti-Reverse(Feed-in Control)	Prevent the inverter from feeding power to the grid	Yes	Turned on when user's local authority prohibits inverter from selling electricity to the grid.
Feed-in Power limit	When anti-reverse function is enabled, the power fed to the grid is limited.	Yes	When anti-reverse function is enabled, user can manually set the minimum feed-in power. The feed power will not be higher than this value
Anti-Reverse Mode	Anti-Reverse method	No	Users don't need to setup
3P3W/3P4W	Wiring method in Grid side	No	Only fro 3 phase. Generally, it is default with three-phase four-wire system.

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Voltage level	Local Grid type	No	Default adaptive. Set according to actual situation
Input frequency	Set according to the frequency requirements of local national grid	No	default 50Hz
Output voltage coeff.	Adjusting the output voltage	No	
ACCoupling mode	Connect to PV inverter	No	only need to set when the inverter being connected to a PV inverter to expand power generation.
Enablishment side grid power limit enable	Whether to limit the power of the grid input inverter	No	only need to set When the Grid is weak
Grid power limit	Limit the power of the grid input inverter	No	only need to set When the Grid is weak
BMS RS485 multiplexing	Change the function of the BMS/RS485 interface, and set it to connect to BMS communications or external EMS device communications	No	When using an external EMS device to control the inverter, it need to select "Slave Secondary Port"
Stand-alone/parallel	Single inverter running, or multiple machines running in parallel	No	only need to set when inverter running in parallel
Number of device	When multiple inverters are running in parallel, fill in the total number of inverters.	No	only need to set when inverter running in parallel
Parallel device SN	When multiple inverters are running in parallel, fill in the serial number of each inverter in order.	No	only need to set when inverter running in parallel
1 Phase parallel mode	Ordinary parallel or three 1 phase parallel to 3 phase	No	Set according to usage

Professional settings			
Fan gear		No	For RD/Test purpose only
Fixed power factor		No	For RD/Test purpose only
Self aging type		No	For RD/Test purpose only
Comp. rate	Battery to load output ratio	No	For RD/Test purpose only
Test mode		No	For RD/Test purpose only
Software oscilloscope enable		No	For RD/Test purpose only
Temperature derating	When the inverter temperature is too high, the output will be derated.	No	
Grid unbalance comp.	When connected to the grid, the unbalanced three-phase load can be compensated by batteries.	No	enabled by default
Inverter power limit	Limit inverter output power	No	
Output derating factor	Ratio of inverter's nominal power to actual output power	No	
Rated power	Inverter rated output power	No	
Special settings			
DERD interface		No	For RD/Test purpose only
Active charge/discharge	Set the battery to actively charge or discharge	No	turn it on when use EMS to control the inverter
Charging/discharging power	Set the power of active battery charging or active battery discharging	No	Setting it when use EMS to control the inverter
PV input method	PV connection method, independent	Yes	when choosing the PV access method

	or parallel connection		
On/Off grid switching method	Select automatic method or manual metho to switch over on/off-grid pattern	No	Automatic method is generally recommended.
N-PE relay	Connect the N and PE lines together internally	No	Set according to usage
Off grid machine enable		No	Not enabled
Off-grid with PV Only	Only PV connection works	Yes	Inverter can still work when both the grid and the battery are disconnected
DRM		No	For RD/Test purpose only
Data dump			
Celar total power	Clear the displayed total power data	No	
Celar daily energy	Clear the displayed current day's power data	No	
Factory reset	Restore all settings to default values	No	
Power on automatic battery activation	Activate the battery after the inverter is powered on	No	Disenabled by default
Arc sensor enable	AFCI	No	Disenabled by default
Reactive power compensation	The inverter compensates the reactive power of the load	No	Disenabled by default
PV Access insulation testing	Detect whether the PV panel has leakage	No	Disenabled by default
PV Type	Select the type of PV module to be connected	No	
PV manufacture	Select PV module manufacturers to access	No	

Master Settings-Peripheral(Settings for installers)			
DO function	Dry contact output	No	Enable when using generator or heat pump
Meter	Control whether or not the meter is connected	Yes	enabled by default
CT Ratio		No	No user setup required
Meter detection		No	No user setup required
Meter CT ratio		No	No user setup required
Meter model	The meter model connected to the system	Yes	Set according to usage
Meter response mode	Select the meter responds speed	No	
Generator	Select the working mode after connecting the generator	No	Not enabled
Master Settings-Certification(Settings for installers)			
Connection waiting time	The time from grid disconnection to grid reconnection, default 60s	Yes	user can modify it to a shorter time (provided it complies with local standards)
Certification country	Select the country where the inverter is installed	No	just set it in first installation
Battery Settings(Settings for installers)			
Batt enabled	Enable Battery	Yes	Enabled by default
Battery type	Type of connected battery	Yes	select according to the actual type of connected battery
Battery connection method	Batteries can be connected in parallel or independently	Yes	when switching the battery access method
Batt			
Batt capacity		No	Inverter automatic reading

Batt protocol	Select communication protocol between battery and inverter	Yes	Set according to usage
BMS communication method	Batteries can be connected in parallel or independently	Yes	when switching the battery access method
Batt min. soc	Battery stops discharging value when off-grid	Yes	Set according to usage
Batt maximum soc	Battery stops charging value	Yes	Set according to usage
Batt backup soc	Battery stops discharging value when on-grid	Yes	Set according to usage
Batt discharge hysteresis	The value of charge required from the min. soc to be able to discharge again	Yes	Set according to usage
Batt rated voltage	Battery rated charging voltage	Yes	Set according to usage
Batt overvoltage setting value	Battery charging voltage upper limit value	Yes	Set according to usage
Batt undervoltage setting	Battery charging voltage lower limit value	Yes	Set according to usage
Batt Max. Charge current	Battery maximum charging current	Yes	set the maximum charging current of battery
Batt Max. Discharge current	Battery maximum discharge current	Yes	set the maximum discharge current of battery
Batt activation	Used to wake up the battery when it is sleep	No	
PV			
PV Enabled	Enable PV	Yes	Enabled by default
Battery self-test completed		No	For RD/Test purpose only
1 battery in parallel	One battery connected to multiple inverters	No	Set according to usage

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Battery self-test		No	For RD/Test purpose only

For Certification Purpose	
High voltage ride through	For grid connection certification purpose only
Low voltage ride through	For grid connection certification purpose only
Overfrequency,load reduction,and underfrequency loading standards	For grid connection certification purpose only
Starting point of overfrequency and load reduction	Automatically adapt to certification country
Overfrequency load reduction slope	Automatically adapt to certification country
Overfrequency and load reduction recovery point	Automatically adapt to certification country
Overfrequency and load reduction recovery time	Automatically adapt to certification country
Underfrequency loading starting point	Automatically adapt to certification country
Underfrequency loading slope	Automatically adapt to certification country
Underfrequency loading recovery point	Automatically adapt to certification country
Underfrequency loading recovery time	Automatically adapt to certification country
First order value triggered by overvoltage	Automatically adapt to certification country
Overvoltage triggered first-order trip time	Automatically adapt to certification country
Overvoltage triggered second-order value	Automatically adapt to certification country
Overvoltage triggered second-order trip time	Automatically adapt to certification country
Third order value triggered by overvoltage	Automatically adapt to certification country
Third order trip time triggered by overvoltage	Automatically adapt to certification country
10 minute overvoltage protection value	Automatically adapt to certification country

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Undervoltage triggering first-order value	Automatically adapt to certification country
Undervoltage triggered first-order trip time	Automatically adapt to certification country
Undervoltage trigger second-order value	Automatically adapt to certification country
Undervoltage triggered second-order trip time	Automatically adapt to certification country
Undervoltage trigger third-order value	Automatically adapt to certification country
Undervoltage triggered third-order trip time	Automatically adapt to certification country
Overfrequency trigger first-order value	Automatically adapt to certification country
Overfrequency triggered first-order trip time	Automatically adapt to certification country
Overfrequency trigger second-order value	Automatically adapt to certification country
Overfrequency triggered second-order trip time	Automatically adapt to certification country
Underfrequency trigger first-order value	Automatically adapt to certification country
Underfrequency triggered first-order trip time	Automatically adapt to certification country
Underfrequency trigger second-order value	Automatically adapt to certification country
Underfrequency triggered second-order trip time	Automatically adapt to certification country
Connection voltage upper limit	Automatically adapt to certification country
Lower limit of connection voltage	Automatically adapt to certification country
Connection frequency upper limit	Automatically adapt to certification country
Lower limit of connection frequency	Automatically adapt to certification country
Power factor curve enable	Automatically adapt to certification country
Equipment mode test command	Automatically adapt to certification country
European standard QU curve enable	Automatically adapt to certification country
European standard PU curve	Automatically adapt to certification country

enable	
Fixed reactive power setting	Automatically adapt to certification country
Slope of active power change	Automatically adapt to certification country
Grid connected power reconnection time	Automatically adapt to certification country
Power factor control starting voltage	Automatically adapt to certification country
Power factor control endpoint voltage	Automatically adapt to certification country
Power factor control starting point power	Automatically adapt to certification country
Power factor control endpoint power	Automatically adapt to certification country
Power factor control starting point PF	Automatically adapt to certification country
Power factor control endpoint PF	Automatically adapt to certification country
Reactive current response time	Automatically adapt to certification country
Overfrequency and load reduction mode	Automatically adapt to certification country
Underfrequency load mode	Automatically adapt to certification country
PUQU curve voltage filtering assignment	Automatically adapt to certification country
CEI curve mode	Automatically adapt to certification country
Initial derating coefficient for overfrequency	Automatically adapt to certification country
Underfrequency initial derating coefficient	Automatically adapt to certification country
Protection reconnection rate	Automatically adapt to certification country
Active current response time	Automatically adapt to certification country
Compensation rate for grid connection certification	Automatically adapt to certification country
PU coordinate point 1 voltage	Automatically adapt to certification country
PU coordinate point 1 active power	Automatically adapt to certification country

PU coordinate point 2 voltage	Automatically adapt to certification country
PU coordinate point 2 active power	Automatically adapt to certification country
PU coordinate point 3 voltage	Automatically adapt to certification country
PU coordinate point 3 active power	Automatically adapt to certification country
PU coordinate point 4 voltage	Automatically adapt to certification country
PU coordinate point 4 active power	Automatically adapt to certification country
QU coordinate point 1 voltage	Automatically adapt to certification country
QU coordinate point 1 reactive power	Automatically adapt to certification country
QU coordinate point 2 voltage	Automatically adapt to certification country
QU coordinate point 2 reactive power	Automatically adapt to certification country
QU coordinate point 3 voltage	Automatically adapt to certification country
QU coordinate point 3 reactive power	Automatically adapt to certification country
QU coordinate point 4 voltage	Automatically adapt to certification country
QU coordinate point 4 reactive power	Automatically adapt to certification country
First-order low-voltage crossing voltage	Automatically adapt to certification country
First order low-pressure crossing time	Automatically adapt to certification country
Second order low-voltage crossing voltage	Automatically adapt to certification country
Second order low-pressure crossing time	Automatically adapt to certification country
First order high-voltage crossing voltage	Automatically adapt to certification country
First order high-pressure crossing time	Automatically adapt to certification country
Second order high-voltage crossing voltage	Automatically adapt to certification country
Second order high-pressure crossing time	Automatically adapt to certification country

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Third order high-voltage crossing voltage	Automatically adapt to certification country
Third order high-pressure crossing time	Automatically adapt to certification country
Fourth order high-voltage crossing voltage	Automatically adapt to certification country
Fourth order high-pressure crossing time	Automatically adapt to certification country
Fifth order high-voltage crossing voltage	Automatically adapt to certification country
Fifth order high-pressure crossing time	Automatically adapt to certification country
Overfrequency and load reduction response time	Automatically adapt to certification country
Underfrequency loading response time	Automatically adapt to certification country
Settings for RD & Test purpose, or settings not enabled yet.	
Dred interface	For RD/Test purpose only, will be updaed in future version
Software oscilloscope enable	For RD/Test purpose only, will be hidden in future version
Test mode	For RD/Test purpose only, will be hidden in future version
Self aging type	For RD/Test purpose only, will be hidden in future version
Compensation rate	For RD/Test purpose only, will be hidden in future version
A-phase grid voltage calibration	For RD/Test purpose only, will be hidden in future version
B-phase grid voltage calibration	For RD/Test purpose only, will be hidden in future version
C-phase grid voltage calibration	For RD/Test purpose only, will be hidden in future version
A-phase load voltage calibration	For RD/Test purpose only, will be hidden in future version
B-phase load voltage calibration	For RD/Test purpose only, will be hidden in future version
C-phase load voltage calibration	For RD/Test purpose only, will be hidden in future version
A-phase load current calibration	For RD/Test purpose only, will be hidden in future version
B-phase load current calibration	For RD/Test purpose only, will be hidden in future version

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C-phase load current calibration	For RD/Test purpose only, will be hidden in future version
A-phase inverter voltage calibration	For RD/Test purpose only, will be hidden in future version
B-phase inverter voltage calibration	For RD/Test purpose only, will be hidden in future version
C-phase inverter voltage calibration	For RD/Test purpose only, will be hidden in future version
A-phase inverter current calibration	For RD/Test purpose only, will be hidden in future version
B-phase inverter current calibration	For RD/Test purpose only, will be hidden in future version
C-phase inverter current calibration	For RD/Test purpose only, will be hidden in future version
Battery 1 voltage calibration	For RD/Test purpose only, will be hidden in future version
Battery 2 voltage calibration	For RD/Test purpose only, will be hidden in future version
Battery 1 current calibration	For RD/Test purpose only, will be hidden in future version
Battery 2 current calibration	For RD/Test purpose only, will be hidden in future version
PV 1 voltage calibration	For RD/Test purpose only, will be hidden in future version
PV 2 voltage calibration	For RD/Test purpose only, will be hidden in future version
PV 1 current calibration	For RD/Test purpose only, will be hidden in future version
PV 2 current calibration	For RD/Test purpose only, will be hidden in future version
Positive BUS voltage calibration (DCAC)	For RD/Test purpose only, will be hidden in future version
Negative BUS voltage calibration (DCAC)	For RD/Test purpose only, will be hidden in future version
Positive BUS voltage calibration (DCDC)	For RD/Test purpose only, will be hidden in future version
Negative BUS voltage calibration (DCDC)	For RD/Test purpose only, will be hidden in future version
Voltage calibration of DC converters	For RD/Test purpose only, will be hidden in future version
DC converters current calibration	For RD/Test purpose only, will be hidden in future version

Zero calibration of inverter voltage A-phase direct current	For RD/Test purpose only, will be hidden in future version
Zero calibration of inverter voltage B-phase direct current	For RD/Test purpose only, will be hidden in future version
Zero calibration of inverter voltage C-phase direct current	For RD/Test purpose only, will be hidden in future version
Zero calibration of inverter current A-phase direct current	For RD/Test purpose only, will be hidden in future version
Zero calibration of inverter current B-phase direct current	For RD/Test purpose only, will be hidden in future version
Zero calibration of inverter current C-phase direct current	For RD/Test purpose only, will be hidden in future version
A-phase oil engine voltage calibration	For RD/Test purpose only, will be hidden in future version
B-phase oil engine voltage calibration	For RD/Test purpose only, will be hidden in future version
C-phase oil engine voltage calibration	For RD/Test purpose only, will be hidden in future version
A-phase oil engine current calibration	For RD/Test purpose only, will be hidden in future version
B-phase oil engine current calibration	For RD/Test purpose only, will be hidden in future version
C-phase oil engine current calibration	For RD/Test purpose only, will be hidden in future version
PV 3 voltage calibration	For RD/Test purpose only, will be hidden in future version
PV 4 voltage calibration	For RD/Test purpose only, will be hidden in future version
PV 3 current calibration	For RD/Test purpose only, will be hidden in future version
PV 4 current calibration	For RD/Test purpose only, will be hidden in future version
Battery 1 discharge current calibration	For RD/Test purpose only, will be hidden in future version
Battery 2 discharge current calibration	For RD/Test purpose only, will be hidden in future version
Debugging variable address 1	For RD/Test purpose only, will be hidden in future version
Debugging variable address 2	For RD/Test purpose only, will be hidden in future version
Debugging variable address 3	For RD/Test purpose only, will be hidden in future version

Debugging variable address 4	For RD/Test purpose only, will be hidden in future version
Debugging variable address 5	For RD/Test purpose only, will be hidden in future version
Debugging variable address 6	For RD/Test purpose only, will be hidden in future version
Monitoring status	For RD/Test purpose only, will be hidden in future version
Input voltage	Not enabled, will be deleted in futur version
Fan gear	Not enabled, will be deleted in futur version
CT ratio	Not enabled, will be deleted in futur version
Output voltage adjustment coefficient	Not enabled, will be deleted in futur version
Inverter power limitation	Not enabled, will be deleted in futur version
Anti backflow mode	Not enabled, will be deleted in futur version
Battery 1 enabled	Not enabled, will be deleted in futur version
Battery 2 enabled	Not enabled, will be deleted in futur version
PV 1 enabled	Not enabled, will be deleted in futur version
PV 2 enabled	Not enabled, will be deleted in futur version
PV 3 enabled	Not enabled, will be deleted in futur version
PV 4 enabled	Not enabled, will be deleted in futur version
Battery 1 capacity	Not enabled, will be deleted in futur version
Battery 1 overvoltage setting value	Not enabled, will be deleted in futur version
Battery 2 capacity	Not enabled, will be deleted in futur version
Battery 2 overvoltage setting value	Not enabled, will be deleted in futur version
Battery self-test completed	Not enabled, will be deleted in futur version