Running param setting

```
        PassWord

          * * * *
```

Pic 1.01 Password

```
ActiveP      0%          Vref      0.0V
Q-Mode       OFF <<      ReactP    0.0%  <<
```

```
PF         -1.000        Fun_RCD     OFF <<
Fun_ISO    OFF <<        SelfCheck   0S
```

```
Island      OFF <<       Limiter     OFF
Meter       OFF          Feed-in     0%  <<
```

```
MPPT Num    0            ARC          ON
WindTurbine    <<        OF-Derate  OFF <-
```

```
UF-Uprate OFF <-         WGra       0.0%  <<
WGra    0.000%           WGraStr    0.0%
```

```
PU         ON            LVRT       OFF
PowerLim      <<         HVRT       OFF <<
```

```
DRM        OFF           Sunspec    OFF <<
Sunspec    OFF <<        ZVRT          <<
```

```
OK      Cancel <<
```

Pic 1.02

Name	Description	Range
ActiveP	Adjust the output active power in %	0-110%
Q-Mode	Multiple reactive power control modes	OFF/Q(P)/PF(P)/Q(U)/PF/Q(%)
Vref	Grid reference voltage for functions including Q(U),PF(P),P(U)etc.	80-260V
ReactP	Adjust reactive power output in %	-100%-+100%
PF	Power Fator	-1-0.8~+0.8-1
Fun_ISO	Insulation resistance detection	ON/OFF
Fun_RCD	Residual current detection	ON/OFF
Self-check	Inverter's self-check time.The default value 60s	0-1000s
Island	Anti-islanding protection	ON/OFF
Meter	If you want to use zero output mode,please set Meter to ON and select OFF to view data only	ON/OFF
Feed_IN %	It is used to deploy how much power can be feed in to grid when the inverter works under zero export mode.(For example,Feed_in=50% of the 12KW model and load power is 5KW. which means Max 6KW power can be feed into grid after inverter providing 5Kw to the load firstly.	0-100%

Pic 1.03

Name	Description	Range
ARC	Arc-fault detection function	ON/OFF/CLR
OF-Derate	Active power response to over-frequency	ON/OFF/HYS
UF-Uprate	Active power response to under-frequency	ON/OFF
PU	power response to grid voltage deviation	ON/OFF
LVRT	voltage ride through function	ON/OFF
HVRT	voltage ride through function	ON/OFF
PowerLim	Hard/soft export limit control	ON/OFF
DRM	Demand Response Modes	ON/OFF
Sunspec	Sunspec Function	ON/OFF
WGraStr	Percentage of Nominal Power per second	0.1%~10%
WGra	percentage of Nominal Power per second	0.1%~10%
ZVRT	Zero Current Mode	ON/OFF

Pic 1.04

```
ISO SEN    MIN<<
Back
```
```
ISO SEN    HIG<<
Back
```
```
ISO SEN    MID<<
Back
```

Pic 1.05 FUN_ISO

| RCD SEN   MIN << | ARC SEN   HIG << |
| Back | Back |

| ARC SEN   MID << |
| Back |

Pic 1.06 FUN_RCD

| Island SEN MIN << | Island SEN HIG << |
| Back | Back |

| Island SEN MID << |
| Back |

Pic 1.07 Island

| ARC SEN   HIG << | ARC SEN   MID << |
| Back | Back |

| ARC SEN   MIN << |
| Back |

Pic 1.08 ARC

Over-frequency Response

This series inverter provides "over-frequency response" function.
Long pressing the "OFD Mode" to enter the "over-frequency response" setting menu.

```
ARC        ON
OF-Derate  ON <-
```

```
ARC        ON
OFDMode    HYS <-
```

```
ARC        ON
OF-Derate  OFF <-
```
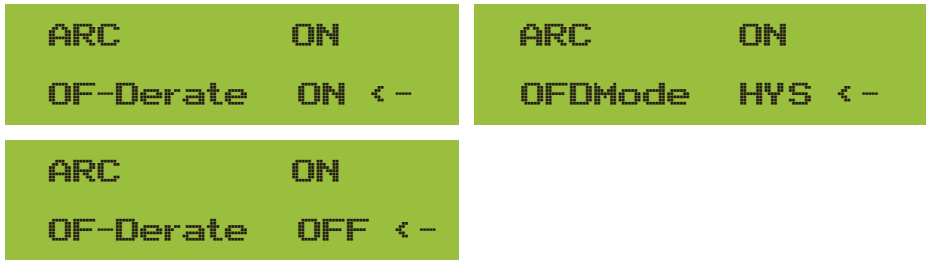
Tab. 1-1 Definition of Over-frequency Response Parameters

Parameter	Range	Description
Fstr	45HZ-65HZ	The Start frequency value for over-frequency response.
Fstop	45HZ-65HZ	The Stop frequency value for over-frequency response.
RecGra	[3,500] 0.01%Pmax/s	Rate of Power recovery(Percentage of active power)

For example, StrtPT: 50.5Hz, StopPT: 51.5Hz, RecPT: 50.1Hz, when the grid frequency increases beyond Start: 50.5Hz, the inverter will linearly reduce the power output with a gradient of 100% Pmax/Hz until it reaches StopPT: 51.5Hz.

```
Fstr       50.50Hz
Fstop      51.50Hz <<
```
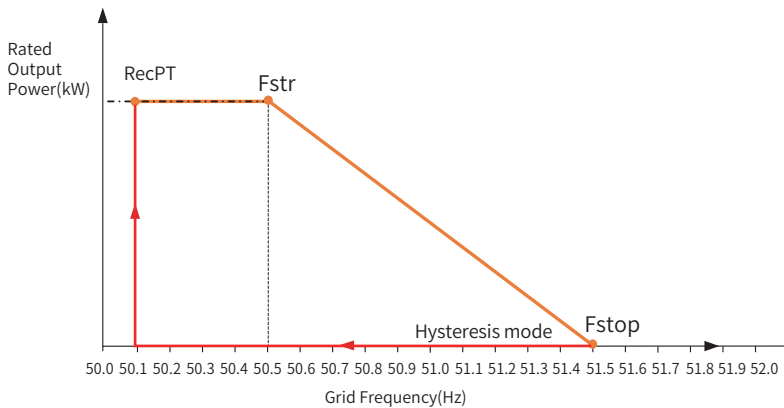

Fig. 1-1 Frq-Watt Mode for Over-frequency Conditions

HardLimitation	HardLimitation
Enable OFF <<	Point 0.0% <<

SoftLimitation	SoftLimitation
Enable OFF <<	Point 0.0% <<

PTD_H 0.0S	OK << Cancel
M_OFF 0.0%<<	

Pic 1.09 PowerLim

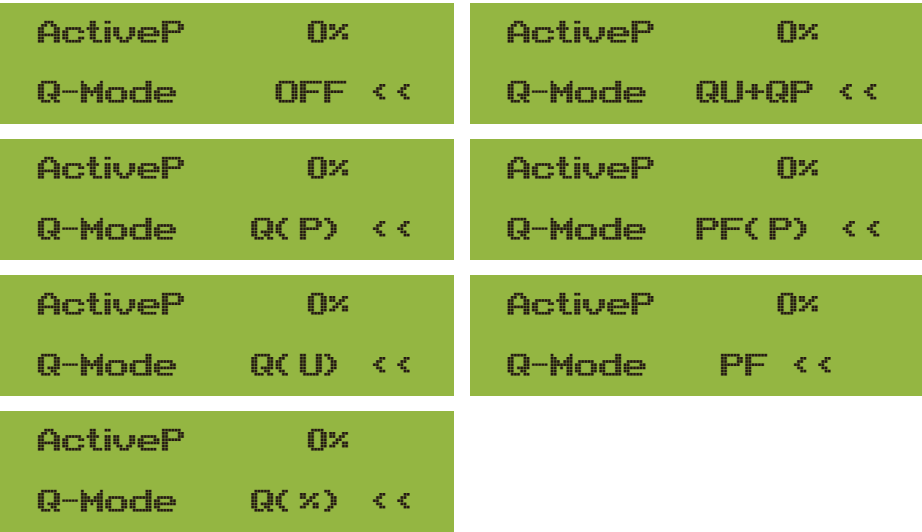| Vstart 0.0%	OK Cancel <<
Vsop 0.0% <<	

Pic 1.10 LVRT

When the frequency exceeds Fstop: 51.5Hz, the inverter output should stop (ie 0 W).
When the frequency is lower than Fstop: 51.5 Hz, the inverter will linearly increase the power output with a gradient of 100% Pmax/Hz until it reaches Fstr: 50.5 Hz.
In the hysteresis mode, when the frequency is lower than Fstop: 51.5 Hz, the inverter will not increase the power output until it is lower than RecPT: 50.1 Hz.

```
Frec        50.10Hz        RecDly        0s
RecGra      0.00% <<       RsponDy       0s <<
```

```
OK    <<    Cancel
```

The inverter provides a reactive power regulation function.
Tap **Reactive Power Regulation Mode** to select proper regulation mode and set the corresponding parameters.

Pic 1.11 OF-Derate

```
ActiveP     0%             ActiveP       0%
Q-Mode      OFF <<         Q-Mode    QU+QP <<
```

```
ActiveP     0%             ActiveP       0%
Q-Mode      Q(P) <<        Q-Mode    PF(P) <<
```

```
ActiveP     0%             ActiveP       0%
Q-Mode      Q(U) <<        Q-Mode      PF <<
```

```
ActiveP     0%
Q-Mode      Q(%) <<
```

Pic 1.12

- **"OFF" Mode**

  The reactive power regulation function is disabled. The PF is fixed at +1.000

- **Q(%)**

  Adjust reactive power output in %.

- **"PF" Mode**

  The power factor (PF) is fixed and the reactive power is regulated by the parameter PF. The PF ranges from 0.8 leading to 0.8 lagging.

  ・Leading: the inverter is absorbing reactive power from the Grid.
  ・Lagging: the inverter is injecting reactive power into the grid.

  - **"Q(U)" Mode**

    The reactive power output of the inverter varies in response to the grid voltage.

  - **"Q(P)" Mode**

    The reactive power output by the inverter is controlled by the active power of the inverter.
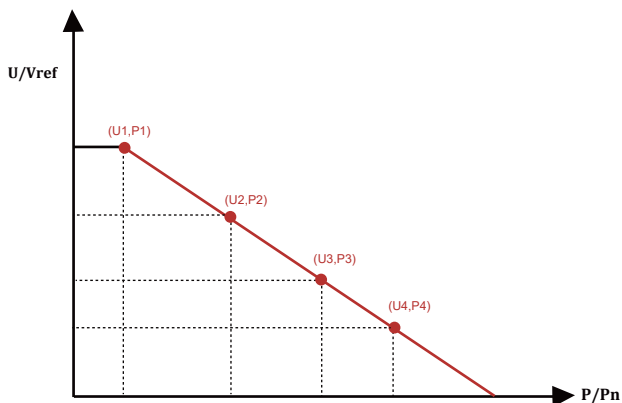
  - **"PF(P)" Mode**

    The PF is controlled by the active power of the inverter.

"PU" Mode

The active power output of the inverter varies in response to the grid voltage.

WGraStr	0.0%		WGraStr	0.0%
PU	OFF <-		PU	ON <-

V1	0.0% <<		V2	0.0% <<
P1	0.0%		P2	0.0%

V3	0.0% <<		V4	0.0% <<
P3	0.0%		P4	0.0%

Ti	0s
OK	Cancel <<

Pic 1.13 Active Power Regulation Curve in PU Curve

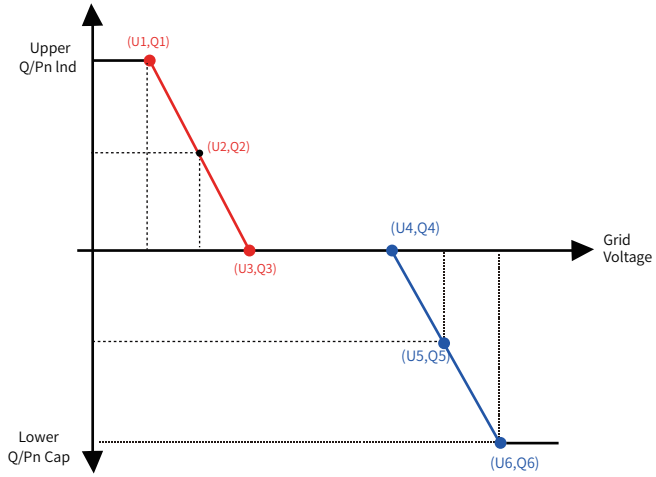| Parameter	Range	Descrption
P1	0%-110% Pn	Value of P/Pn at point (P1,U1) on the PU mode curve
U1	0% -150% Vref	Grid voltage limit at point (P1,U1) on the PU mode curve
P2	0%-110% Pn	Value of P/Pn at point (P2,U2) on the PU mode curve
U2	0% -150% Vref	Grid voltage limit at point (P2,U2) on the PU mode curve
P3	0%-110% Pn	Value of P/Pn at point (P3,U3) on the PU mode curve
U3	0% -150% Vref	Grid voltage limit at point (P3,U3) on the PU mode curve
P4	0%-110% Pn	Value of P/Pn at point (P4,U4) on the PU mode curve
U4	0% -150% Vref	Grid voltage limit at point (P4,U4) on the PU mode curve
Ti	0-1000s	The adjustment time of PU Curve in seconds (time to accomplish a change of 95%).

"PU" Mode Parameters Explanation

"Q(U)" Mode

ActiveP	0%	Pstart	0.0% <<
QMode	Q(U) <-	Pstop	20.0%

RmpTime	0s	UrefAuto	0s
RmpUref	0 <<	PtUsed	0 <<

V1	0.0% <<	V2	0.0% <<
Q1	0.0%	Q2	0.0%

V3	0.0% <<	V4	0.0% <<
Q3	0.0%	V4	0.0%

V5	0.0% <<	V6	130.0% <<
Q5	0.0%	Q6	30.0%

Q6	0.0%
OK	Cancel <<

Pic 1.14

Pic 1.15 Reactive Power Regulation Curve in Q(U) Curve

Parameter	Range	Description
Pstart	0%-130% Rate out power	The QU mode starts when the active power is greater than this value
Pstop	0%-130% Rate out power	The QU mode stops when the active power is less than this value
Q1	-60% -60% Q/Pn	Value of Q/Pn at point (U1,Q1) on the Q(U) mode curve
V1	0-110% VRated	Grid voltage limit at point (U1,Q1) on the Q(U) mode curve
Q2	-60% -60% Q/Pn	Value of Q/Pn at point (U2,Q2) on the Q(U) mode curve
V2	0-110% VRated	Grid voltage limit at point (U2,Q2) on the Q(U) mode curve
Q3	-60% -60% Q/Pn	Value of Q/Pn at point (U3,Q3) on the Q(U) mode curve
V3	0-110% VRated	Grid voltage limit at point (U3,Q3) on the Q(U) mode curve
Q4	-60% -60% Q/Pn	Value of Q/Pn at point (U4,Q4) on the Q(U) mode curve
V4	0-110% VRated	Grid voltage limit at point (U4,Q4) on the Q(U) mode curve
Q5	-60% -60% Q/Pn	Value of Q/Pn at point (U5,Q5) on the Q(U) mode curve
V5	0-110% VRated	Grid voltage limit at point (U5,Q5) on the Q(U) mode curve
Q6	-60% -60% Q/Pn	Value of Q/Pn at point (U6,Q6) on the Q(U) mode curve
V6	0-110% VRated	Grid voltage limit at point (U6,Q6) on the Q(U) mode curve
RMpTime	0-1000s	Increase or decrease the time required for the reactive power to reach the specified value of the curve.

"Q(U)" Mode Parameters Explanation

"Q(P)" Mode

The reactive power output by the inverter is controlled by the active power of the inverter.
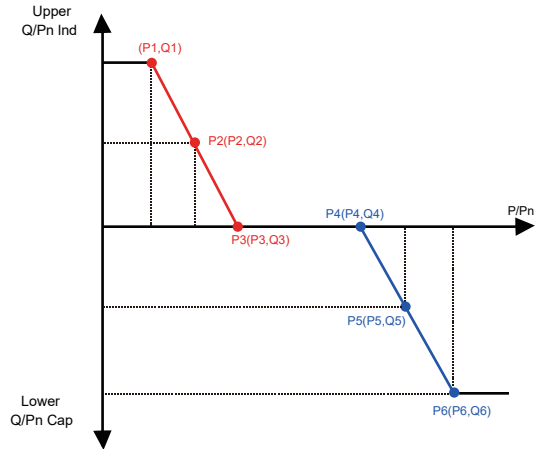
Pic 1.16 Reactive Power Regulation Curve in Q(P) Mode

ActiveP 20.0%		P1 0.0% <<	
QMode QP <-		Q1 0.0%	
P2 0.0% <<		P3 0.0% <<	
Q2 0.0%		Q3 0.0%	
P4 0.0% <<		P5 0.0% <<	
Q4 0.0%		Q5 0.0%	
P6 0.0% <<		OK << Cancel	
Q6 0.0%			

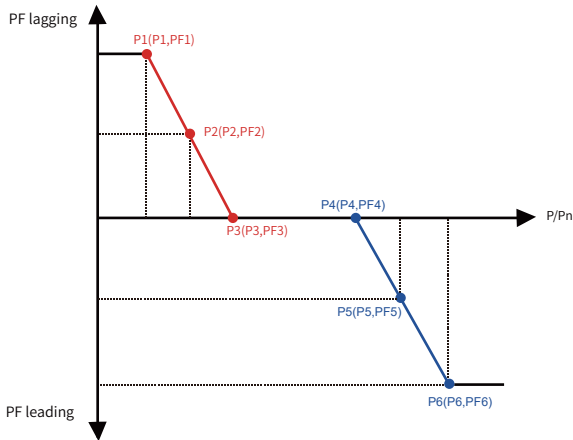| Parameter	Range	Description
P1	0%-100% Pn	Power value/Pn at point (P1,Q1) on the Q(P) mode curve
Q1	-60% -60% Q/Pn	Reactive power value at point (P1,Q1) on the Q(P) mode curve
P2	0%-100% Pn	Power value/Pn at point (P2,Q2) on the Q(P) mode curve
Q2	-60% -60% Q/Pn	Reactive power value at point (P2,Q2) on the Q(P) mode curve
P3	0%-100% Pn	Power value/Pn at point (P3,Q3) on the Q(P) mode curve
Q3	-60% -60% Q/Pn	Reactive power value at point (P3,Q3) on the Q(P) mode curve
P4	0%-100% Pn	Power value/Pn at point (P4,Q4) on the Q(P) mode curve
Q4	-60% -60% Q/Pn	Reactive power value at point (P4,Q4) on the Q(P) mode curve
P5	0%-100% Pn	Power value/Pn at point (P5,Q5) on the Q(P) mode curve
Q5	-60% -60% Q/Pn	Reactive power value at point (P5,Q5) on the Q(P) mode curve
P6	0%-100% Pn	Power value/Pn at point (P6,Q6) on the Q(P) mode curve
Q6	-60% -60% Q/Pn	Reactive power value at point (P6,Q6) on the Q(P) mode curve

"Q(P)" Mode Parameters Explanation

"PF(P)" Mode

The output power factor is controlled by the active power of the inverter.

Vstart	0.0%	P1	0.0%
Vstop	0.0%	PF1	-1.000 <<
P2	0.0%	P3	0.0%
PF2	-1.000 <<	PF3	-1.000 <<
P4	0.0%	P5	0.0%
PF4	-1.000 <<	PF5	-1.000 <<
P6	0.0%	RmpTime	0s
PF6	-1.000 <<	OK	Cancel <<

Pic 1.17 Power factor Regulation Curve in PF(P) Mode

Parameter	Range	Description
Vstart	0-150% Vref	The PFP mode is enable when grid voltage is greater than Vstart
Vstop	0-150% Vref	The PFP mode is disable when grid voltage is less than Vstop
P1	0-110% Pn	Power value at point (PF1,P1) on the PF(P) Curve
PF1	0.8 leading - 0.8 lagging	PF value at point (PF1,P1) on the PF(P) Curve
P2	0-110% Pn	Power value at point (PF2,P2) on the PF(P) Curve
PF2	0.8 leading - 0.8 lagging	PF value at point (P2,PF2) on the PF(P) Curve
P3	0-110% Pn	Power value at point (P3,PF3) on the PF(P) Curve
PF3	0.8 leading - 0.8 lagging	PF value at point (P3,PF3) on the PF(P) Curve
P4	0-110% Pn	Power value at point (P4,PF4) on the PF(P) Curve
PF4	0.8 leading - 0.8 lagging	PF value at point (P4,PF4) on the PF(P) Curve
P5	0-110% Pn	Power value at point (P5,PF5) on the PF(P) Curve
PF5	0.8 leading - 0.8 lagging	PF value at point (P5,PF5) on the PF(P) Curve
P6	0-110% Pn	Power value at point (P6,PF6) on the PF(P) Curve
PF6	0.8 leading - 0.8 lagging	PF value at point (P6,PF6) on the PF(P) Curve
RMpTime	0-1000s	The time of the PFF Curve in seconds (time to accomplish a change of 95%).

"PF(P)" Mode Parameters Explanation