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Programming Manual

UDP3000 SERIES DC Power Supplies

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1. *IDN?

Syntax
*IDN? <name>

Functional Description
Query the instrument information of manufacturer name, product model, product serial number and software version.

Return Format
The query returns <manufacturer>, < product model>, <serial number>, < software version>.

2. *SAV

Syntax
*SAV <name>

Functional Description
Save the current setting with the specified name into nonvolatile memory.

Example
*SAV 1
Save the current setting with the specified name “1” into nonvolatile memory.

3. *RCL

Syntax
*RCL <name>

Functional Description
Recall the saved instrument status.

Example
*RCL 1
Recall the system “status 1” from nonvolatile memory.

4. INSTrument

Syntax
INSTrument < channel >
< Channel > :={ CH1 | CH2| CH3}

Functional Description
Select the channel that need to be operated.

Example
INSTrument CH1

5. INSTrument?

Syntax
INSTrument?

Functional Description
Query the currently operating channel.

Example
INSTrument? The query returns CH1.

6. MEASure:CURRent?

Syntax
MEASure:CURRent? < channel >
< Channel >: ={ CH1 | CH2| CH3}

Functional Description
Query the measuring current value on the output terminal of the specified channel. If no channel is specified, then query the currently operating channel.

Example
MEASure:CURRent? CH1 The query returns 3.000.

7. MEASure:VOLTage?

Syntax
MEASure:VOLTage? < channel>
< Channel >: ={ CH1 | CH2| CH3}

Functional Description
Query the measuring voltage value on the output terminal of the specified channel. If no channel is specified, then query the currently operating channel.

Example
MEASure:VOLTage? CH1 The query returns 30.000.

8. MEASure:POWEr?

Syntax
MEASure:POWEr? < channel >
< Channel >: ={ CH1 | CH2}

Functional Description
Query the measuring power value on the output terminal of the specified channel. If no channel is specified, then query the currently operating channel.

Example
MEASure:POWEr? CH1 The query returns 90.000.

9. [SOURce:]CURRent <Current>

Syntax
< Channel >: [SOURce:]CURRent < current value >

< Channel > :={ CH1 | CH2}

Functional Description
Set the current value for the currently operating channel.

Example
CH1:CURRent The query returns 0.5.

10. [SOURce:]CURRent?

Syntax
< Channel >: CURRent?
< Channel >: { CH1 | CH2}

Functional Description
Query the current value of the currently operating channel.

Example
CH1:CURRent? The query returns 0.5.

11. [SOURce:]VOLTage <volt>

Syntax
< Channel >: VOLTaget < voltage value >
< Channel >: ={ CH1 | CH2}

Functional Description
Set the voltage value for the currently operating channel.

Example
CH1:VOLTage 25

12. [SOURce:] VOLTage?

Syntax
< Channel >: VOLTage?
< Channel >: ={ CH1 | CH2}

Functional Description
Query the voltage value of the currently operating channel.

Example
CH1:VOLTage? The query returns 25.

13. OUTPut

Syntax
OUTPut, < status >
<Status> :={ ON | OFF}

Functional Description
Turn on/off the specified channel.

Example
OUTPut ON

14. OUTPut:TRACk

Syntax
OUTPut:TRACK <NR1>
<NR1>: = {0 | 1| 2, it respectively represents independent, serial connection and parallel connection.}

Functional Description
Select the operating mode.

Example
OUTPut:TRACK 0

15. OVP:STATus

Syntax
OVP:STATus,< status >
< Status >: = {ON | OFF}

Functional Description
Turn on/off overvoltage protection.

Example
OVP:STATus ON

16. OCP:STATus

Syntax
OCP:STATus < status >
< Status > :={ ON | OFF}

Functional Description

Turn on/off overcurrent protection.

Example
OCP:STATus ON

17. OVP:SETting

Syntax
OVP:SETting < channel >,< voltage value >
< Channel > :={ CH1 | CH2}

Functional Description
Set the voltage value of overvoltage protection.

Example
OVP:SETting CH1，32

18. OCP:SETting

Syntax
OCP:SETting < channel >,< current value >
< Channel > :={ CH1 | CH2}

Functional Description
Set the current value of overcurrent protection.

Example
OCP:SETting CH1, 3

19. OVP:VALUE?

Syntax
OVP:VALUE? < channel >
< Channel > :={ CH1 | CH2}

Functional Description
Read the voltage value of overvoltage protection.

Example
OVP:VALUE? CH1

20. OCP: VALUE?

Syntax

OCP: VALUE? < channel >
< Channel > :={ CH1 | CH2}

Functional Description
Read the current value of overcurrent protection.

Example
OCP: VALUE? CH1

21. Recall: STAT?

Syntax
Recall: STAT?

Functional Description
Read recalled data status
The query returns
0 represents not recall data status.
1 represents recall M1.
2 represents recall M2.
3 represents recall M3.
4 represents recall M4.
5 represents recall M5.

Example
Recall: STAT? The query returns 1.

22. SYSTem: ERRor?

Syntax
SYSTem: ERRor?

Functional Description
Read the error code and information of power supply.

Syntax
SYSTem:VERSion?

Functional Description
Query the software version.

23. SYSTem:VERSion?

Syntax

SYSTem:STATus?

Functional Description
Return the working status of the instrument.

24. SYSTem: STATus?

Example
SYSTem:STATus? The query returns 0x0224.

Description
The return information is hexadecimal notation. When the user confirms the status, it needs to convert to binary format. The conversion relation is as follows.

Bit Number	Status
0	0: CH1 CV mode; 1: CH1 CC mode
1	0: CH2 CV mode; 1: CH2 CC mode
2,3	01: Independent mode; 10: Parallel mode 11: Serial mode
4	0: Output off ; 1: enable
5	0: OVP off ; 1: enable OVP
6	0: OCP off ; 1:enable OCP