UNI-T®

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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 measured current value on the output terminal of the specified channel. If no channel is specified, it then query the currently selected 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 measured voltage value on the output terminal of the specified channel. If no channel is specified, it then query the currently selected channel.

Example

MEASure:VOLTage? CH1 The query returns 30.000.

8. MEASure:POWEr?

Syntax

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

Functional Description

Query the measured power value on the output terminal of the specified channel. If no channel is specified, it then query the currently selected 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 specified 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 specified 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 specified channel.

Example

CH1:VOLTage 25

12. [SOURce:] VOLTage?

Syntax

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

Functional Description

Query the voltage value of the currently specified 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 settings
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 in hexadecimal notation. When the user confirms the status, it needs to convert to binary format. The hexadecimal values represent system status 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