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# Programming Manual

UDP1000 Series DC Power Supplies

# Instruction List

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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. MEASure****Syntax**

```
MEASure:CURRent?
```

**Functional Description**

Query the measuring current value on the output terminal of the specified channel.

**Example**

```
MEASure:CURRent?      The query returns 3.000.
```

**Syntax**

```
MEASure:VOLTage?
```

**Functional Description**

Query the measuring voltage value on the output terminal of the specified channel.

**Example**

```
MEASure:VOLTage?      The query returns 30.000.
```

**Syntax**

```
MEASure:POWER?
```

**Functional Description**

Query the measuring power value on the output terminal of the specified

channel.

**Example**

MEASure:POWEr?     The query returns 90.000.

## 5. SOURce

**Syntax**

CURRent <current value>

**Functional Description**

Set the current value for the channel.

**Example**

CURRent 0.5

**Syntax**

CURRent?

**Functional Description**

Query the current value of channel.

**Example**

CURRent?     The query returns 0.5.

**Syntax**

VOLTage < voltage value >

**Functional Description**

Set the voltage value for the channel.

**Example**

VOLTage 25

**Syntax**

VOLTage?

**Functional Description**

Query the voltage value of channel.'

**Example**

VOLTage?     The query returns 25.

## 6. OUTPut

### Syntax

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

### Functional Description

Turn on/off the channel.

### Example

OUTPut ON

## 7. OVP:STATus

### Syntax

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

### Functional Description

Turn on/off overvoltage protection.

### Example

OVP:STATus ON

## 8. OCP:STATus

### Syntax

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

### Functional Description

Turn on/off overcurrent protection.

### Example

OCP:STATus ON

## 9. OVP:SETting

### Syntax

OVP:SETting <voltage value>

### Functional Description

Set the voltage value of overvoltage protection.

**Example**

OVP:SETting 32

**10. OCP:SETting****Syntax**

OCP:SETting < current value >

**Functional Description**

Set the current value of overcurrent protection.

**Example**

OCP:SETting 3

**11. OVP:VALUE?****Syntax**

OVP:VALUE?

**Functional Description**

Read the voltage value of overvoltage protection.

**Example**

OVP:VALUE?

**12. OCP:VALUE?****Syntax**

OCP:VALUE?

**Functional Description**

Read the current value of overcurrent protection.

**Example**

OCP:VALUE?

**13. SYSTem****Syntax**

SYSTem:ERRor?

### Functional Description

Read the error code and information of power supply.

### Syntax

SYSTem:VERSion?

### Functional Description

Query the software version.

### Syntax

SYSTem:STATus?

### Functional Description

Return the working status of the instrument.

### Example

SYSTem:STATus? The query returns 0x0024.

### 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: CV mode; 1: CC mode              |
| 1          | 0: Output off; 1: enable            |
| 2          | 0: OVP off ; 1: enable OVP          |
| 3          | 0: OCP off ; 1: enable OCP          |
| 4          | Storage 1 status, 0: off; 1: enable |
| 5          | Storage 2 status, 0: off; 1: enable |
| 6          | Storage 3 status, 0: off; 1: enable |
| 7          | Storage 4 status, 0: off; 1: enable |
| 8          | Storage 5 status, 0: off; 1: enable |