



# **Online UPS Q&A**

DN-170093 • DN-170094  
DN-170095 • DN-170096

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# 1. Alarm or fault reference code

Event log	UPS Alarm Warning	Buzzer	LED
1	Rectifier Fault	Beep continuously	Fault LED lit
2	Inverter fault (Including Inverter bridge is shorted)	Beep continuously	Fault LED lit
9	Fan fault	Beep continuously	Fault LED lit
12	Selftest fault	Beep continuously	Fault LED lit
13	Battery Charger fault	Beep continuously	Fault LED lit
15	DC Bus over voltage	Beep continuously	Fault LED lit
16	DC Bus below voltage	Beep continuously	Fault LED lit
17	DC bus unbalance	Beep continuously	Fault LED lit
18	Soft start failed	Beep continuously	Fault LED lit
19	Rectification model Over Temperature	Twice per second	Fault LED lit
20	Inverter model Over Temperature	Twice per second	Fault LED lit
26	Battery over voltage	Once per second	Fault LED blinking
29	Output Short-circuit	Once per second	Fault LED blinking
30	Input current limit	Once per second	Fault LED blinking
31	Bypass over current	Once per second	BPS LED blinking
32	Overload	Once per second	INV or BPS LED blinking

33	No battery	Once per second	Battery LED blinking
34	Battery under voltage	Once per second	Battery LED blinking
35	Battery low pre-warning	Once per second	Battery LED blinking
36	Overload time out	Once per 2 seconds	Fault LED blinking
37	DC component over limit.	Once per 2 seconds	INV LED blinking
39	Mains volt. Abnormal	Once per 2 seconds	Battery LED lit
40	Mains freq. abnormal	Once per 2 seconds	Battery LED lit
41	Bypass Not Available		BPS LED blinking
42	Bypass out of tracking range		BPS LED blinking
45	EPO Enable	Beep continuously	Fault LED lit

### **Fault analysis:**

When a fault occurs, record the status of display, and then fix the reason in accordance with the following questions.

1. If the input supply is abnormal? (over/under voltage)
2. If load changes? (capacity or type)
3. If a burn mark on PCBA?
4. If smelly odor?
5. If abnormal noise?
6. If bad environment? (dust or moisture)
7. High temperature of UPS or ambient environment?

If fault occurs inside the UPS, contact your dealer with UPS S/N, photos of error code, load type, and environmental information.

## 2. Troubleshooting

If the UPS system does not operate correctly, please solve the problem by using the table below and the Trouble Shooting Chart.

Symptom	Possible cause	Remedy
No indication and alarm even though the mains are normal.	1. The AC input power is not connected well.	<ul style="list-style-type: none"> <li>Check if input power cord firmly connected to the mains.</li> </ul>
	2. The AC input is connected to the UPS output.	<ul style="list-style-type: none"> <li>Plug AC input power cord to AC input correctly.</li> </ul>
Alarm code is shown as "33" and battery led blinking.	The external or internal battery is incorrectly connected.	Check if all batteries are connected well.
Alarm code is shown as "26" and battery led blinking.	Battery voltage is too high, or the charger is fault.	Contact your dealer.
Alarm code is shown as "34" and battery led blinking	Battery voltage is too low, or the charger is fault.	Contact your dealer.
Alarm code is shown as "32" and INV or BYPASS led blinking.	UPS is overload	Remove excess loads from UPS output.
Alarm code is shown as "29" and FAULT led light.	The UPS shut down automatically because short circuit occurs on the UPS output.	Check output wiring see if connected devices are in short circuit status.
Alarm code is shown as "9" and FAULT led light.	Fan fault.	Contact your dealer.
Alarm code is shown as "01,02,15,16,17,18"	A UPS internal fault has occurred.	Contact your dealer.

Alarm code is shown as 45	EPO is not fixed properly when not used.	Put the jumper cap (pin) back on EPO port to avoid to trigger the EPO function.
Battery backup time is shorter than nominal value	1. Batteries are not fully charged	<ul style="list-style-type: none"> <li>• Charge the batteries for at least 5 hours and then check capacity. If the problem persists, consult your dealer.</li> </ul>
	2. Batteries defect	<ul style="list-style-type: none"> <li>• Contact your dealer to replace the battery.</li> </ul>

### 3. Question

**Which environment or loading is Digitus Online UPS suitable for?**

**Answer:**

Digitus Online UPS is suitable for workstations, network servers, computer rooms and data center. Digitus Online UPS cannot connect motor loads, such as laser printers and refrigerators.

**My UPS is showing the battery at 0V voltage and 0% capacity on the display. Does the battery need to be replaced?**

**Answer:**

Please run battery test (UPS self-test mode): Press and hold "On/Enter Button" for 2 seconds to enter UPS self-testing while in AC mode.

If it is still abnormal, please help to check each battery with multi-meter. If a battery voltage is less than 10V; then the battery is broken and needs a replacement.

**Note:** The lifetime of a lead-acid battery is 2-4 years, even if it is not used frequently at all.

**We turned on the UPS but is no voltage coming out of the UPS (does not supply), no alarm, and no information from the screen. Why?**

**Answer:**

When starting up the online UPS, user needs to press ON button for over 3 seconds.

Even though a short press can light up the LCD, but it only acts as the charger to charge the batteries. Inverter is not working so there is no output in the socket.

**What are the proper instructions for calibration?**

**Answer:**

Calibration:

- Keep UPS at AC mode, to charge the batteries for at least 12 hours
- Connect testing load under AC mode.
- Switch to battery mode, discharge battery until reaching EOD and UPS switches off. Record the autonomy time.  
\*\*UPS will calibrate automatically after a cycle of fully charge & fully discharge\*\*
- Switch to AC mode & charge the battery for at least 12 hours
- Connect testing load under AC mode
- Switch to battery mode. Check whether the autonomy time on the display is close to the autonomy time you recorded in step 4.

To ensure display the battery backup time more accurately, it is necessary to set the correct battery capacity.

All UPS and EBP cabinets	Number of battery strings	UPS LCD Battery capacity setting
UPS only (internal batteries)	1 (default)	9AH (default)
UPS + 1 EBP	3	27 AH
UPS + 2 EBPs	5	45AH
UPS + 3 EBPs	7	63AH
UPS + 4 EBPs	9	81AH
<b>Note:</b> The UPS contains one battery string; each EBP contains two battery strings.		

## What is error 33?

Error 33 means no battery, could be loose wiring or bad battery.

Please open the front panel and take out the battery box, check whether all cables are fixed properly.

Then, please measure the battery voltage one by one. If the battery voltage is under 10V, it means the battery has reached the end of its life and needs to replace all the batteries.

### Several reasons make batteries end of life.

The more charge and discharge, the sooner it reaches the end of life. Other reasons could be not charging the battery for 3-6 months (depending on storage temp.), connecting low load and slow discharge that causes battery overdrain, etc.

## What is the solution of Error 45: EPO?

### Answer:

Error 45 means EPO enable. Please ask the client to check whether EPO is fixed properly.



From the factory delivery, there should be a jumper cap (pin) on the EPO port to avoid triggering the EPO function.

Customer should not remove the pin if EPO function is not used.

45	EPO Enable	Beep continuously	Fault LED lit
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## What is error 27 & 28? What should we do to solve the problem?

### Answer:

The error code 27 & 28 is L/N reverse. Please plug the power cord in the other direction.

Symptom	Possible cause	Remedy
Alarm code is shown as "27&28" and FAULT led light.	Mains Input reverse& Bypass Input reverse	Check input L/N wiring in reverse connection

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