

# P R B X

POWERBOX Medline 1100  
OBS01Series  
1100W Single Output  
AC/DC Medical Switch Mode Power Supply  
Application Note

## Fan Control

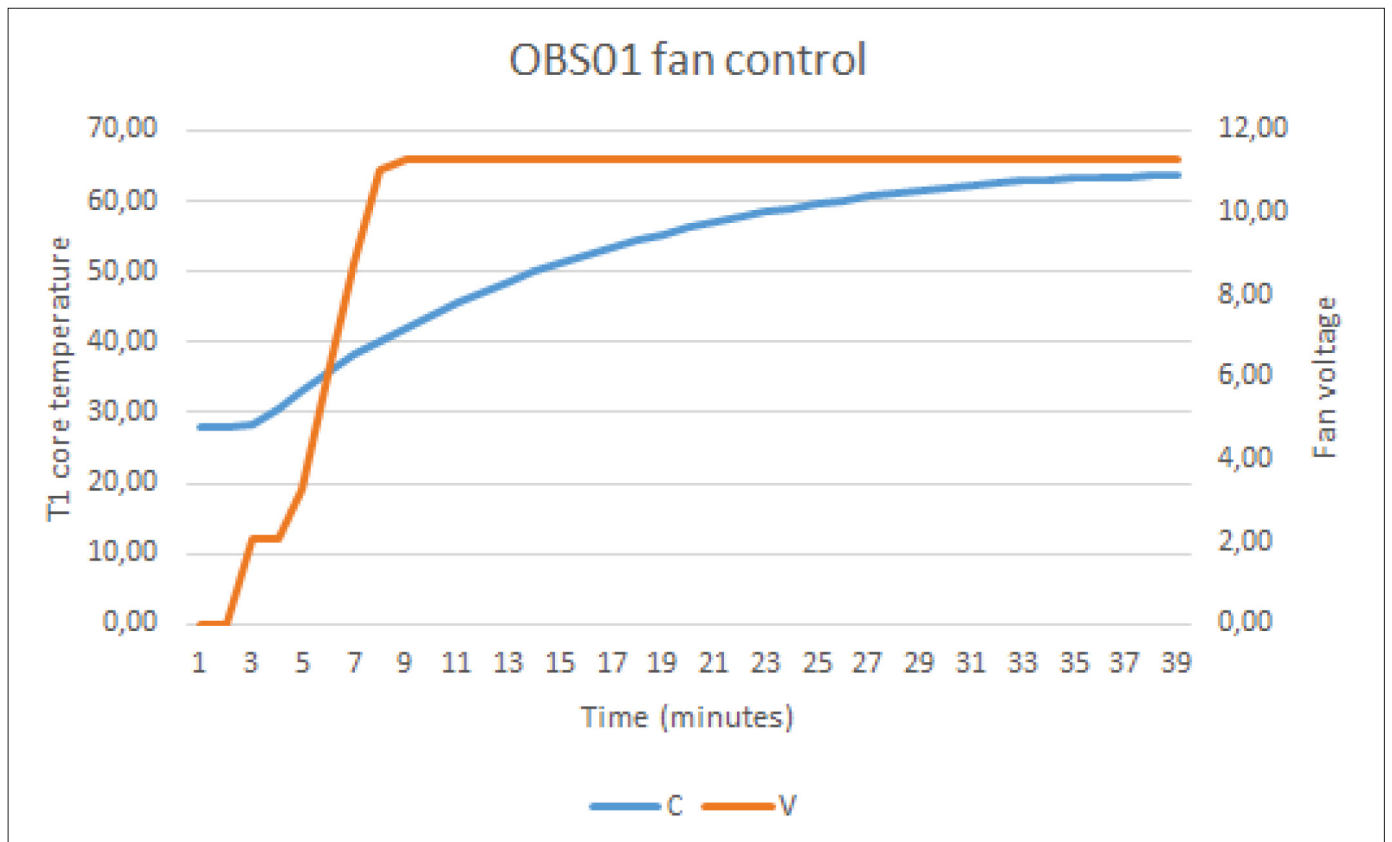
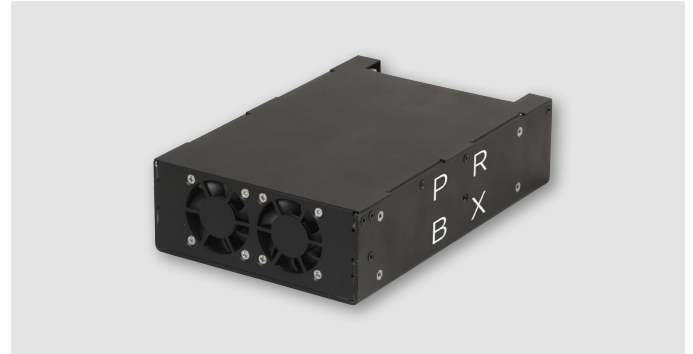
This application note describe the function of the fan control in the OBS01.

The fan speed is dependant of the internal temperature in T1 core.

During a typical load condition 1100 W at 90 VAC input the following T1 core temperatures was measured as well as fan operating voltages.

Please note in the chart below that fan speed is directly related to fan operating voltage.

0 VDC No fan function  
12 VDC Full speed



The fan is critical for the function of the OBS01. During installation, please ensure to reserve a free space around the air intake, approx 3-5 cm, and also that the air intake will get access to an filtered air flow with lowest ambient temperature available. An obstructed air intake, dust or too warm ambient temperature will affect the performance of the OBS01.

Please contact your local Powerbox sales office for more information.

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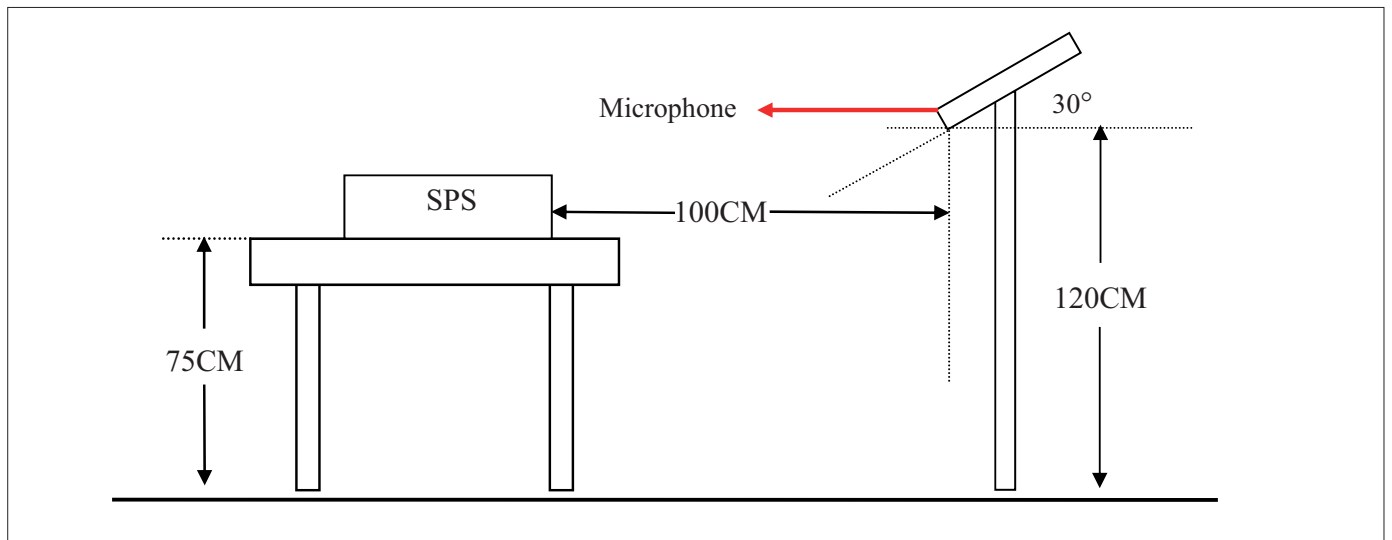
Acoustic Emissions

**Test Condition:**

Ambient Temperature: 25.1°C  
 Ambient Humidity: 48%RH  
 AC input: 110Vac/60Hz; 220Vac/50Hz  
 Background Noise: 9.10dB(A)

**Load Condition**

| Loading | 0% | 25%    | 50%    | 75%    | 100%   |
|---------|----|--------|--------|--------|--------|
| +24V    | 0A | 11.46A | 22.92A | 34.38A | 45.84A |



**Test Record**

| Vin / Fin dB(A) | 0%   | 25%  | 50%  | 75%  | 100% |
|-----------------|------|------|------|------|------|
| 110Vac / 60Hz   | 10.3 | 48.8 | 49.3 | 49.3 | 49.3 |
| 220Vac / 50Hz   | 10.1 | 48.6 | 49.3 | 49.3 | 49.3 |

Specifications are subject to change without notice.