

Ten Power Problems Affecting Your System

■ ONEAC AC Power Solution for
Business-Critical Continuity™



Not all power problems are the same. Some are not as obvious as a blackout and can go undetected until damage is done to sensitive circuitry in your system. In the electrical industry, 10 different power problems have been identified. Correctly identifying and addressing power problems and finding the right solution are key in keeping any system running at peak performance.

To help you, Emerson Network Power, ONEAC AC Power business has the knowledge and expertise to identify the problems affecting today's systems. ONEAC products are designed to provide the highest level of protection against any power and communication line disturbances for any level of risk, significantly improving reliability of the system, regardless of conditions.

Power Problem	Customer Problems	Descriptions	FilterPro	ConditionOne	ONePlus	ON m	ON Series	Sinergy S II	Sinergy SE II	Desk Power	Linear Plus
1. Blackout	Data loss	Failure of input power source			X	X	X	X	X	X	X
2. Sags	Circuit breakers tripping, equipment shutdown	Low input voltage for a short period			X	X	X	X	X	X	X
3. Surges	Blown Fuses, incorrect readings on test equipment	High input voltage (>110%) for short times			X	X	X	X	X	X	X
4. Under-Voltage	UPS batteries go dead in a very short period of time	Low input voltage for an extended time (a few minutes to a few days)			X	X	X	X	X		X
5. Over-Voltage	Complete electrical equipment failures, over heating	High input voltage for an extended time (a few minutes to a few days)			X	X		X	X		X
6. Harmonic Distortion	Circuit breakers tripping, equipment shutdown	Non sinusoidal shape of input waveform – typically generated by nonlinear loads						X	X		X
7. Electrical Line Noise	Electrical equipment not working properly	High frequency noise caused by RFI or EM from other equipment	X	X	X	X	X	X	X		X
8. Switching/Oscillating Transient	Electrical component failure, burnt resistors and chips	Notch (short under-voltage condition) in the nanosecond range	X	X	X	X	X	X	X		X
9. Frequency Variation	Over heating of transformers, tripped circuit breakers	Change in input frequency						X	X		X
10. Common Mode Noise	Data disruption, poor image quality	Noise between neutral and ground caused by TVSS or other devices “dumping” current into facility grounding system	X	X	X	X	X		X		

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