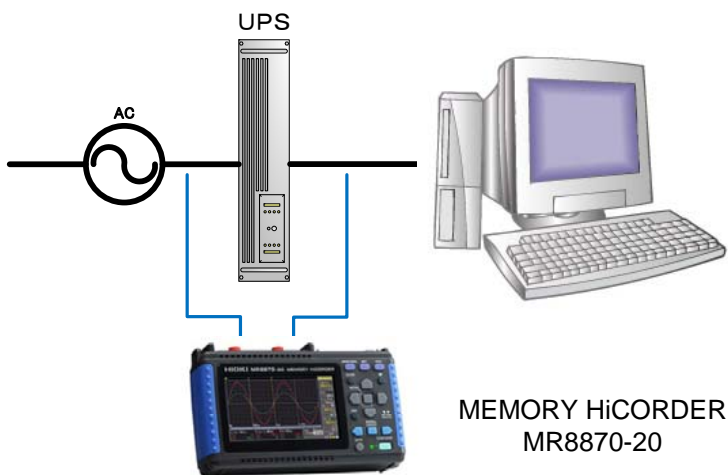


Power Failure Test of Uninterruptible Power Supply (UPS) Systems

Safe and simple observation of primary AC input voltage waveforms and secondary output voltage waveforms of UPS systems

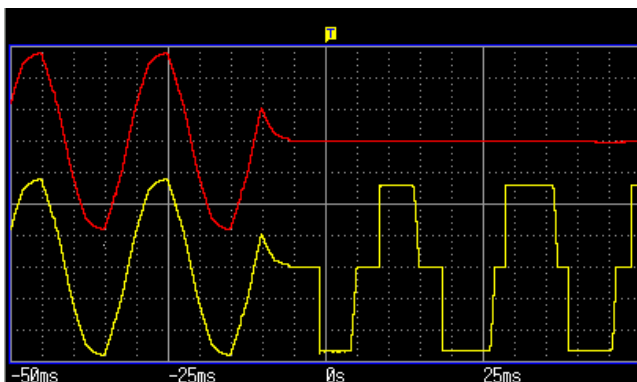
Highlights

- The compact and lightweight MEMORY HiCORDER MR8870-20 can be easily carried to the site of a UPS system.
- Directly input the voltage of a 100 V AC or 200 V AC line on 2 channels.
- Since all channels are isolated, one instrument can input the primary and secondary AC voltages safely.
- Easily capture the power failure waveform by setting a voltage drop trigger for the secondary AC output voltage.



There are 2 types of output waveform for UPS systems, a sine waveform and a square waveform; the latter is often used in low-priced UPS systems.

Note that some connected devices do not work correctly with square waves.



CH1 (red) shows the primary utility power supply voltage waveforms and CH2 (yellow) shows the secondary voltage waveforms of the UPS system.

The waveforms captured by the MR8870-20 are those when a power failure happens to a UPS system that uses the continuous utility power supply method.

It can be observed that normally this method supplies power directly from the utility power supply, but when a power failure is detected, the UPS system switches to supplying AC inverter power from the battery.

However, it is obvious that the waveform changes momentarily at the time of switching, and that the supplied voltage during the power failure is not a sine wave.

Products used

- MEMORY HiCORDER MR8870-20
- CONNECTION CORD L9198 x2
- BATTERY PACK 9780
- PC CARD (512MB) 9728

- Information valid as of November 2014.
- Specifications are subject to change and revision without notice.