

Beam loss monitor system at SPS storage ring

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Siam Photon Source (SPS) storage ring is an electron source with the electron beam energy of 1.2 GeV. In order to better understand behaviors of the electron beam, 50 beam loss monitors (BLMs) have been installed in the SPS storage ring to monitor the electron beam loss signals. BLMs consist of two pin-diodes which are sensitive to the minimum ionizing particles (MIPs) when the electron hits the vacuum chamber. The electron beam loss signals are counted and recorded every second by NI-PXIe system. These results are useful for studying lifetime and stability of the electron beam stored in the SPS storage ring.

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