



## BSRN for NARL

with India

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### BSRN station for NARL in West Bengal

A BSRN (Baseline Surface Radiation Network) station is a high-precision monitoring site that measures solar and thermal radiation at the Earth's surface. It collects data on direct, diffuse, and longwave radiation to study climate change, improve weather models, and support solar energy research. These stations follow strict calibration standards to ensure accurate, long-term global radiation measurements.

Installed in November 2021, the project integrates advanced solar measurement instruments, including the STR-22G dual axis Sun Tracker, MS-57 Class A Pyrheliometer, and various MS-80S and MS-40 pyranometers, MS-21 pyrgeometers and MS-212A UVA and MS-212W UVB radiometers.

The system setup you see in the images is of EKO Instruments Base Station Radiation Network (BSRN) which is one-of-a-kind system that is able to provide the diffused global irradiation (DHI), global horizontal irradiation (GHI) and direct normal irradiation (DNI), long-wave radiation, short-wave radiation, UVA and UVB measurements.

This initiative supports NARL's research in solar energy, contributing to precise radiation assessment for scientific and technological advancements.

<https://www.narl.gov.in/>

#pyranometer

#suntracker

#climatestudies

#bsrn

#india

#pyrheliometer

#narindia

**Instruments:** STR-22G Sun Tracker, MS-80S Pyranometer, MS-40 Pyranometer, MS-21 Pyrgeometer, MV-01 Ventilator & Heater

**Collaborators:** NARL (National Atmospheric Research Laboratory India)

**Measured Parameters:** Diffused global irradiation, global horizontal irradiation and direct normal Irradiation, long-wave radiation, short-wave radiation, UVA and UVB measurements

**Field:** Solar Energy, Climate Studies, Meteorology

**Challenges:** -

**Installation Date:** 2022

**Plant Poser/Size:** -

**Location:** West Bengal - India

