

TERMS OF REFERENCE (ToR)

Position: Field Engineer – AWS

1. Position

Field Engineer – AWS

2. Number of Vacancy

01 (One)

3. Place of Posting

Shillong, with frequent travel to project locations and field sites.

4. Core Purpose of the Position

To provide field-level technical support for the installation, operation, maintenance, monitoring, and troubleshooting of Automatic Weather Station (AWS) and associated electronic, telemetry, and environmental monitoring systems, ensuring reliable data collection and functioning of field equipment.

5. Required Skills & Competencies

- Basic understanding of electrical and electronic circuits and associated equipment.
- Familiarity with weather and environmental sensors, including temperature, humidity, rainfall, wind speed, wind direction, solar radiation, and barometric pressure sensors.
- Basic knowledge of data loggers, telemetry systems, and communication technologies, including GSM/4G, LoRa, RS-232/RS-485 and TCP/IP.
- Ability to diagnose and troubleshoot electrical/electronic equipment using a multimeter and basic diagnostic tools.
- Basic computer proficiency, particularly MS Excel, data handling and preparation of technical reports.
- Basic understanding of GPS, geotagging and GIS concepts will be desirable.
- Ability to follow Standard Operating Procedures (SOPs), maintenance schedules and checklists.
- Good documentation, record-keeping and technical reporting skills.
- Good communication and coordination skills for working with vendors, service providers and project teams.

6. Key Responsibilities

- Assist in the installation, configuration, testing and commissioning of Automatic Weather Stations (AWS).
- Monitor the operational health and performance of AWS through remote monitoring systems.
- Conduct routine preventive maintenance, field inspections and equipment health checks.
- Diagnose and rectify sensor, hardware, power supply and communication-related issues.
- Verify the functioning and, where required, support calibration and validation of sensors and ensure the quality and reliability of weather data.
- Monitor data transmission, connectivity and data availability through telemetry and communication systems.
- Coordinate with vendors and service providers for equipment servicing, repairs, replacement and technical support.
- Maintain maintenance logs, inspection records, equipment inventories and technical documentation.
- Prepare periodic reports on station uptime, data availability, equipment condition, maintenance activities and technical issues.
- Support the integration and transmission of AWS data to cloud platforms, databases and monitoring dashboards.
- Assist in GPS-based location verification, geotagging and basic GIS-related activities, where required.
- Follow prescribed SOPs, maintenance schedules, safety procedures and technical checklists.
- Undertake other technical and field-related responsibilities as assigned by the competent authority.

7. Essential Qualification

Graduate or Post Graduate in:

- Electrical Engineering;
- Electronics Engineering; or
- Meteorological Engineering from a recognized university/institution.

8. Essential Experience

Minimum 02–03 years of relevant experience in installation, operation, maintenance, or monitoring of:

- Electronic instruments;
- IoT devices;
- Weather stations;
- Environmental monitoring systems;
- Telemetry systems; or
- Similar electronic/electrical equipment.

9. Essential Skills & Competencies

- Basic understanding of electrical and electronic circuits.
- Familiarity with weather and environmental sensors, including:
 - Temperature;
 - Humidity;
 - Rainfall;
 - Wind speed;
 - Wind direction;
 - Solar radiation; and
 - Barometric pressure.
- Basic knowledge of data loggers, telemetry, and communication technologies, including GSM/4G, LoRa, RS-232/RS-485, and TCP/IP.
- Ability to troubleshoot electrical and electronic equipment using a multimeter and basic diagnostic tools.
- Basic computer proficiency, particularly MS Excel and technical report preparation.
- Understanding of GPS, geotagging, and basic GIS concepts will be desirable.
- Ability to follow SOPs and maintenance checklists.
- Good documentation, record-keeping, communication, and coordination skills.
- Ability to work independently in field locations and respond to technical issues in a timely manner.

10. Field Requirements

- The position requires frequent travel to project locations and field sites.
- The candidate should be willing to undertake field-based technical work as required by the project.
- The candidate must be comfortable working in rural and remote locations, where applicable.

11. Remuneration

Rs. 26,000/- per month plus applicable allowance, as per organisational/project norms.

12. General Conditions

The selected candidate shall perform duties in accordance with the requirements of the project and instructions issued by the competent authority. The roles and responsibilities may be modified or expanded as required for effective project implementation.