

# GPMS TECHNOLOGY

GLOBAL POLLUTION MONITORING SYSTEM

Building a Healthier Environmental World • Real-Time Data Connectivity & Reporting

Envitrace Environmental Platform – CPCB / SPCB Ready Monitoring & Compliance

**GPMS** Technology

Envitrace Environmental Platform



**ENVITRACE**

Direct CPCB / SPCB Data Connectivity

**INDUSTRIAL DATA LOGGER**

POWERED BY

**GPMSTECH**

GPMS Technology Pvt. Ltd.

Envitrace X100 is designed by GPMS Technology, combining environmental data-logging, industrial IoT, and CPCB integration know-how built across India's toughest stations.

## Envitrace X100 Industrial IoT Data Logger

For Direct CPCB / SPCB API Compliance – 2025 Protocol Ready

New-Gen CPCB API-Ready

For CEMS / OCEMS / ETP / STP

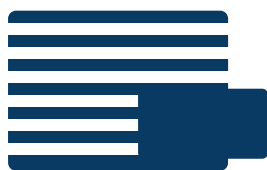
24x7 Industrial Operation

Designed with Envitrace Platform

### ● Fail-Safe Data Transmission & Compliance

- The logger detects CPCB/SPCB posting failures in real time and retries automatically until a positive acknowledgement is received.
- Rejected payloads or temporary CPCB outages trigger queueing and intelligent resend so no sample is dropped.
- If WAN connectivity goes down, the device stores data locally with secure timestamps and pushes instantly once online.
- Dedicated local buffer + auto-backfill = no data loss; compliance records stay audit-ready.
- Central dashboards highlight stations needing attention, reducing site visits and shielding you from non-reporting escalations.

Keep regulators satisfied and compliance teams relaxed—Envitrace keeps the data moving even when networks and boards don't.



Industry



IoT Data Logger Device  
Envitrace X100



CPCB Server

### ● No Analyzer / Panel Change Required

Envitracce X100 connects directly to your existing analyzers, flowmeters, PLCs, RTUs, and panels. RS-485, RS-232, 4–20 mA, Modbus TCP, custom TCP/IP—everything is supported so control panels remain untouched.

- No analyzer replacement, no cabinet rewiring, no downtime.
- We integrate with what you already have, using the same power and signal interfaces.
- Ideal for plants worried about “kya analyzer badalna padega?”—the answer is no.

### ● Live Logger Health & SIM Status

- Dashboard view of logger online/offline state and last successful data posted to CPCB/SPCB.
- Posting health indicators show whether payloads were accepted, queued, or retried.
- SIM/data pack usage and expiry reminders so connectivity doesn't silently expire.
- Proactive alerts when connectivity or logger health needs attention—before CPCB issues a notice.

No more blind spots: plant, corporate, and consultants see the same health snapshot and can act quickly.

### ● Remote Support & Smart Alerts

- Up to 99% configuration and troubleshooting queries are resolved remotely via secure access—no waiting for a field visit.
- Our engineers can securely review diagnostics remotely, validate logs and parameters configuration when needed so issues are resolved quickly without site visits.
- No more routine trips just to restart services; remote restart and diagnostics keep stations steady.

#### Early Warning & Smart Alerts

- Optional pattern-based alerts warn when parameter trends move toward exceedance or when data looks abnormal.
- Email / WhatsApp notifications help your operations team act before CPCB sees any irregularity, keeping plant workflows smooth and warning-free.

Reduce site visits, protect operations, and stay ahead of CPCB/SPCB thresholds with trend-aware monitoring.

### ● Alerts for Logger, Analyzer & Posting Status

- Automatic notifications when logger goes offline, analyzer stops sending data, or posting fails repeatedly.
- SIM/data pack usage warnings, and reminders to recharge before expiry so connectivity never surprises you.
- Configurable severity levels for plant, corporate, and compliance teams to receive the right alerts.

Stay ahead of CPCB/SPCB notices by fixing issues the moment they arise.



**ENVITRACCE** INDUSTRIAL DATA LOGGER

Direct CPCB / SPCB Data Connectivity

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### ● Overview

Industrial IoT data logger for reliable, future-proof CPCB / SPCB connectivity.

Envitracce X100 is an industrial-grade IoT data logger engineered by **GPMS Technology**—the team behind hundreds of CPCB-compliant deployments—to deliver secure, resilient data transmission from analyzers and sensors to CPCB/SPCB servers and the **Envitracce Environmental Platform** ([envitracce.gpmstech.com](http://envitracce.gpmstech.com)). It keeps stations online with smart failover logic, auto-retry, and local buffering so compliance data stays intact even when networks or CPCB endpoints misbehave.

Engineered to reduce nuisance calls from regulators, Envitrace keeps your reporting clean, complete, and on time while giving you proof of data flow whenever auditors ask.

Built on GPMS's decade-long experience in environmental monitoring, IoT, and CPCB integrations, Envitrace X100 supports analyzers across CEMS / OCEMS / ETP / STP infrastructure. No disruption to your existing analyzer setup—Envitrace integrates with what you already have over RS-485, 4–20 mA, Modbus TCP, PLC/RTU links, or TCP/IP without demanding panel rebuilds.

No more surprises when CPCB/SPCB dashboards suddenly mark your station offline.

Clear proof of posting and retries—no more blame games about “maybe the network was down”.

SIM/data usage is visible so packs don't silently expire and stop data without anyone noticing.

We designed Envitrace X100 after listening to plants tired of rigid loggers, repeated site visits, and exceedances being flagged too late.

Direct CPCB / SPCB API Posting

Integrated with Envitrace Console

Secure, Encrypted Communication

Industrial Power & I/O Interfaces

Engineered to reduce nuisance calls from regulators by keeping reporting clean, complete, and on time.

### ● Key Features & Differentiators

- **2-Year Warranty** – extended coverage vs typical 1-year market warranty.
- **3-Year Onboard Data Storage** with secure, timestamped archiving and backfill.
- **Auto-Retry & Auto-Backfill** to handle network drops and ensure CPCB data continuity.
- **Smart Failover** – if CPCB or the network goes down, the logger keeps recording locally and auto-pushes once connectivity resumes, ensuring zero data loss.
- **Safe Local Storage** – every record carries secure timestamps so compliance payloads remain audit-ready even during extended outages.
- **No Analyzer Change Required** – integrates with existing analyzers, flowmeters, PLCs, and RTUs over RS-485 / 4–20 mA / Modbus TCP / TCP/IP without forcing hardware replacement.
- **WiFi + LAN + 4G Dongle Redundancy** for reliable multi-path connectivity.
- **Mobile-First Configuration** via secure hotspot / local web UI – no laptop required.
- **Envitrace Platform Integration** for 24x7 logger health & compliance dashboards.
- **Secure Firmware** with OTA update capability for future CPCB API protocol changes.

### ● CPCB / SPCB Compliance & I/O Support

#### CPCB 2025 Protocol Ready

- Direct HTTPS/API posting to CPCB / RTDMS and state boards.
- Secure authentication and timestamped, audit-ready payloads.
- Configurable station IDs and parameter mappings as per CPCB specs.

#### Analyzer & Sensor Interfaces

- RS-485 / Modbus RTU & RS-232 for CEMS / OCEMS analyzers, PLC/RTU.
- 4–20 mA inputs for legacy instruments and critical parameters.
- TCP/IP (Modbus TCP / custom) for modern smart analyzers.

No analyzer change required—Envitrace X100 connects to what you already have, without disturbing the control panel. Detailed I/O mapping and parameter list can be shared on request based on plant configuration and analyzer make/model.

### ● Connectivity & Reliability

- Multi-path connectivity with Ethernet, WiFi and 4G dongle support.
- Automatic fail-over between available links to maximize uptime.
- Configurable posting intervals and buffer sizes for CPCB / SPCB.
- Local time synchronization and NTP support for accurate timestamps.
- Rugged industrial enclosure suitable for panel mounting.

Designed for continuous 24x7 operation in industrial control panels with proper electrical protection and grounding practices.

## ● **Envitrace Environmental Platform**

Envitrace X100 connects natively to the **Envitrace Console** ([envitrace.gpmstech.com](http://envitrace.gpmstech.com)), enabling:

- Live station online/offline status and last data received time.
- Logger health tracking – connectivity, VPN, SIM/data usage.
- CPCB/SPCB-ready daily, monthly and exception reports.
- Alerts for station offline, data gaps and threshold breaches.

Platform access is restricted to authorised industry users, regulators and Envitrace support partners to maintain data security and auditability.

## ● **Introductory Compliance Support Offer**

**Introductory compliance support offer – contact for quote.**

To support industries in meeting the latest CPCB IoT connectivity directions cost-effectively, Envitrace X100 is being offered under a special introductory program for early adopters.

- Tailored proposal based on number of stations and analyzers.
- Options for remote-only or on-site commissioning support.
- Flexible integration with existing cameras, LED boards and flowmeters.
- Integration performed on existing analyzers/panels, so no hardware replacement or PLC rewiring is required.

**Flexible payment milestones:** 50% after device reaches your site and setup is complete; remaining 50% after 15 days of satisfactory live data on CPCB/SPCB dashboards. We share the risk with you.

Pricing, scope of work and delivery timelines are finalised after understanding your plant configuration and regulatory requirements.

## **Contact & Company Details**

**Company:** GPMS Technology – Global Pollution Monitoring System

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For new industry onboarding, logger integration support or technical discussion with our engineering team, please reach out using the contact details above. We integrate with what you already have so deployments remain predictable and disruption-free, and we are focused on long-term support—not just selling a box.

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All CPCB/SPCB references are based on currently available guidelines and may evolve; firmware and protocols are updated as standards change.

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