

AstrenEpp™

India's First AI-Ready Meter Data Management Platform

The Intelligence Core of Smart Energy

AstrenEpp™ is our flagship Meter Data Management (MDM) platform—engineered to transform raw meter data into clean, validated, and actionable intelligence. It's the digital brain behind modern utilities, enabling billing-grade accuracy, predictive analytics, and regulatory compliance across millions of endpoints.

Built for India's Smart Grid Mandate

Standard	Compliance
IS 15959 Part 3	Structured data formats, VEE engine, multi-vendor compatibility
CEA AMI Guidelines (2023–2025)	Raw data retention, secure key handling, auditability
IEC 61968 / 62056	API-level integration and DLMS/COSEM protocol support
Smart Grid Vision 2030	DER, EV, rooftop solar, and BharatNet compatibility

Core Capabilities

◆ Data Ingestion & Normalization

- Multi-source ingestion from smart meters, DCUs, and HES (e.g., MidasEpp™)
- Schema harmonization across vendors and protocols
- Real-time and batch processing of interval data (15-min, hourly, daily)

◆ VEE Engine

- Automated **Validation** of missing, duplicate, or corrupt data
- Intelligent **Estimation** using historical and peer-based models
- Manual and rule-based **Editing** with full audit trails

◆ Data Publishing & Integration

- RESTful APIs and IEC 61968 adapters for billing, outage, CRM, and analytics systems
- Role-based access for DISCOMs, AMISPs, and third-party platforms
- Event-driven push and pull mechanisms for enterprise workflows

Security & Governance

- AES encryption for data at rest; TLS for data in transit

- Full auditability of every transformation and access event
- Role-based access control with multi-tenant isolation
- Secure key lifecycle management aligned with CEA standards

Intelligence & Analytics

- Load profiling, peak demand analysis, and consumption forecasting
- AI/ML-ready data lake for theft detection, outage prediction, and DER optimization
- Geo-tagged insights for field operations and asset health
- Integration with BI tools, data warehouses, and AI engines

Deployment Models

Model	Description
Cloud-native	Hosted on AWS, Azure, or Bharat Cloud with elastic scaling
On-premise	For utilities requiring local control and data sovereignty
Hybrid	Combines edge caching with centralized intelligence for latency-sensitive zones

Future-Ready Enhancements

- EV charger and rooftop solar data integration
- IPv6, NB-IoT, and 5G protocol support
- BharatNet and Smart City compatibility
- AI-powered diagnostics and field automation
- Plug-and-play onboarding for new meter types and OEMs

AstrenEpp Synergy

- Seamless integration with **MidasEpp™** for unified AMI stack
- Compatible with our predictive engines and field automation modules
- Designed for **scalable commercialization**

Launch with Confidence

Whether you're modernizing legacy infrastructure or deploying a greenfield AMI rollout, **AstrenEpp™** delivers unmatched reliability, scalability, and intelligence—powered by our Smart Grid Platform.

“AstrenEpp isn’t just a data warehouse—it’s the intelligence engine of India’s energy future.”