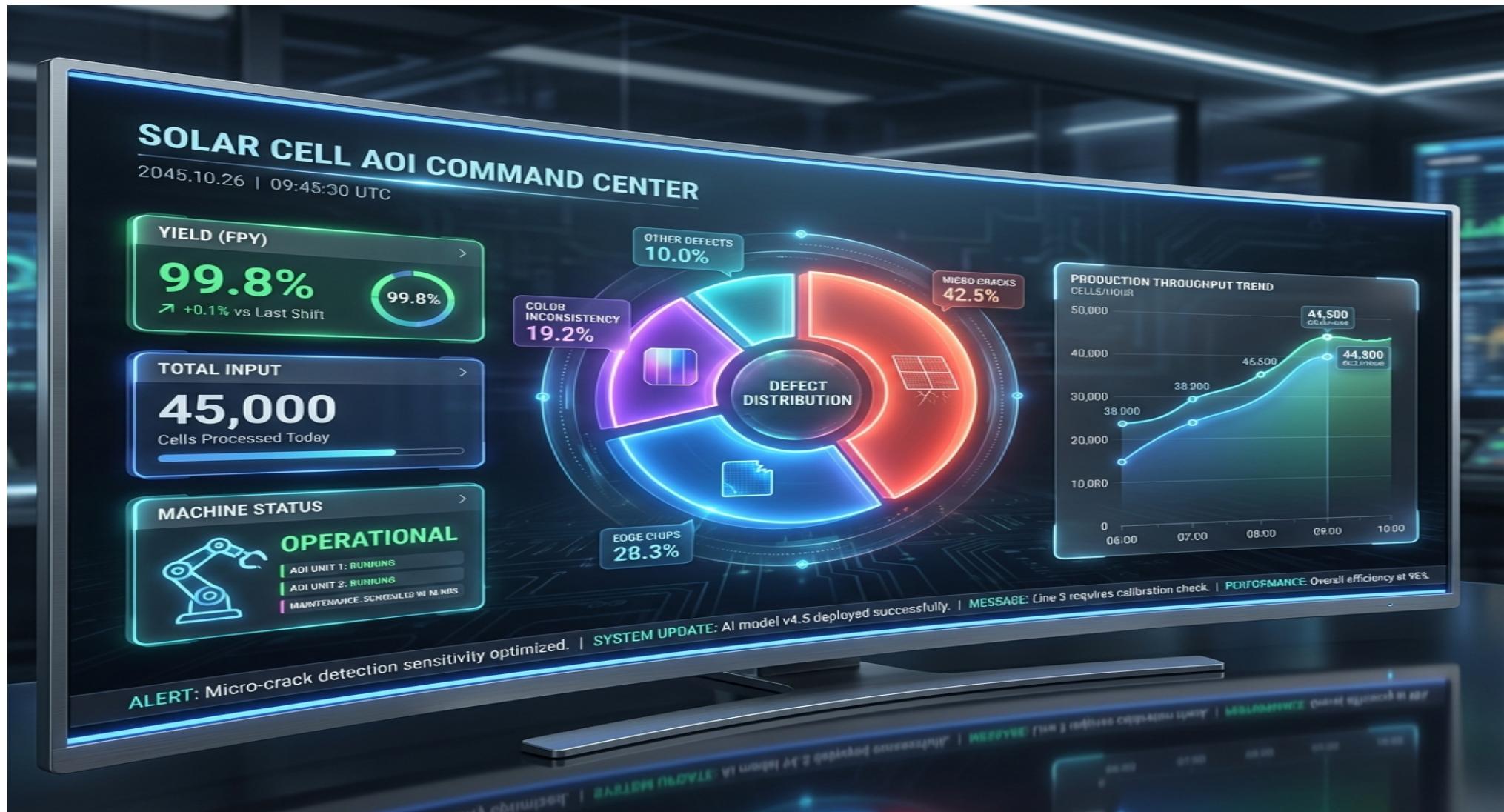


AOI Master: Quality Intelligence

Empowering Solar Manufacturing with Real-Time Data & AI



The Manual Process Bottleneck

Manual Segregation Failures:

- High Latency: Feedback loop takes hours or even shifts.
- Inconsistency: 10-15% error rate due to operator fatigue.
- No Traceability: Counting from bins provides zero digital audit trails.
- Throughput Cap: Manual labor cannot sustain 4,000+ wafers/hour.

Solar Industry Priority: Why AOI Master?

Critical Success Factors:

- Micro-Crack Detection: Preventing breakage in downstream PECVD/Diffusion.
- Color Uniformity: Automated grading.
- Yield Protection: Real-time alerts



System Facilities & Features

- **Real-Time FPY Tracking**Live First Pass Yield monitoring.
- **7-Day Trend Analysis**Predictive maintenance and shift optimization.
- **Defect Type Segregation**AI-driven categorization (Color, Edge, Chip).
- **Multi-Machine Sync**Centralize data from up to 16 cameras.
- **One-Click Compliance**Auto-generate PDF/Excel production reports.

Business Value & Return on Investment

Financial Impact:

- Labor Reduction: Reallocate 70% of inspection staff to technical roles.
- Yield Gains: 0.5% recovery leads to \$150k+ yearly savings per machine.
- Uptime: Faster root cause analysis reduces MTTR (Mean Time To Repair).

AOI Master: Precision at Scale.