



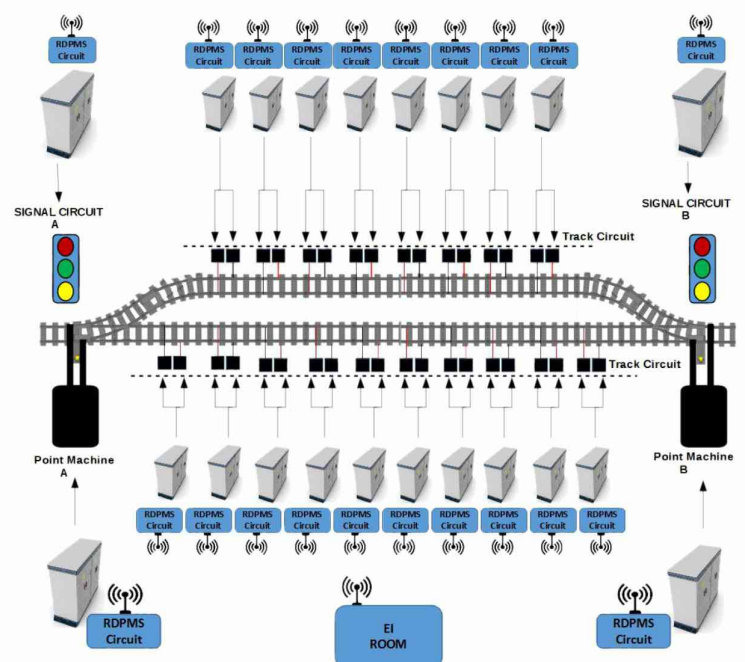
REMOTE DIAGNOSTICS AND PREDICTIVE MAINTENANCE SYSTEM (RDPMS)

About Us

Ciyes Systems is a product engineering solutions company with a proven track record of offering technological solutions to diverse industries, such as semiconductors, constructions, automobiles, avionics, railways and medicine through AI-based embedded technologies.

Overview of RDPMS

Remote Diagnostic & Predictive Maintenance System (RDPMS) – a transformative solution empowering maintenance teams to prevent signaling gear failures proactively. With advanced fault-sensing capabilities, the RDPMS identifies and diagnoses potential issues before they disrupt operations, ensuring timely interventions. Housed within location boxes, the RDPMS units transmit critical data wirelessly to a central hub via RF transmitters, streamlining monitoring. This consolidated data is seamlessly transmitted to the Cloud for comprehensive analysis. This data can be analyzed using advanced data analytics techniques, including Big Data, Machine Learning (ML) and Artificial Intelligence (AI) solutions. This analysis helps identify the probable causes of failures, it also enables the prediction of asset deterioration and the estimation of the remaining useful life assisting maintenance staff in quickly addressing issues and reducing Mean Time to Repair (MTTR)



Monitoring Parameters

 Point Machine ◆ Normal / Reverse operating voltage ◆ Normal / Reverse Indication voltage ◆ Normal / Reverse operation current ◆ Point Motor Vibration	 Track Circuit ◆ Relay end current ◆ Feed end current ◆ Battery charging current ◆ Feed end voltage sensor ◆ Relay end voltage ◆ Proving relay voltage ◆ Choke drop voltage to cloud	 Signal Circuit ◆ GREEN LED voltage and current ◆ RED LED voltage and current ◆ SINGLE YELLOW LED voltage & current	 LC Gates ◆ Operating Voltage of ELB ◆ Operating Current of ELB ◆ LC Gate Relay STATUS
 Axle Counter ◆ Axle Counter Input Voltage ◆ Axle Counter Input current ◆ All vital Relay STATUS	 Relays ◆ Point indication Relay ◆ Track-Related Relay ◆ Signal-Related Relay ◆ All other Relay status	 IPS ◆ All Output Voltage ◆ Health of IPS Module	 Battery Bank ◆ Battery Voltage ◆ Battery charging Current ◆ Battery discharging Current

Architecture

