

Interlocking >>

The Interlocking is a multi-purpose monitoring and controlling system with a Lineside Object Controller. It authorizes train movement and ensures all safety conditions are met.

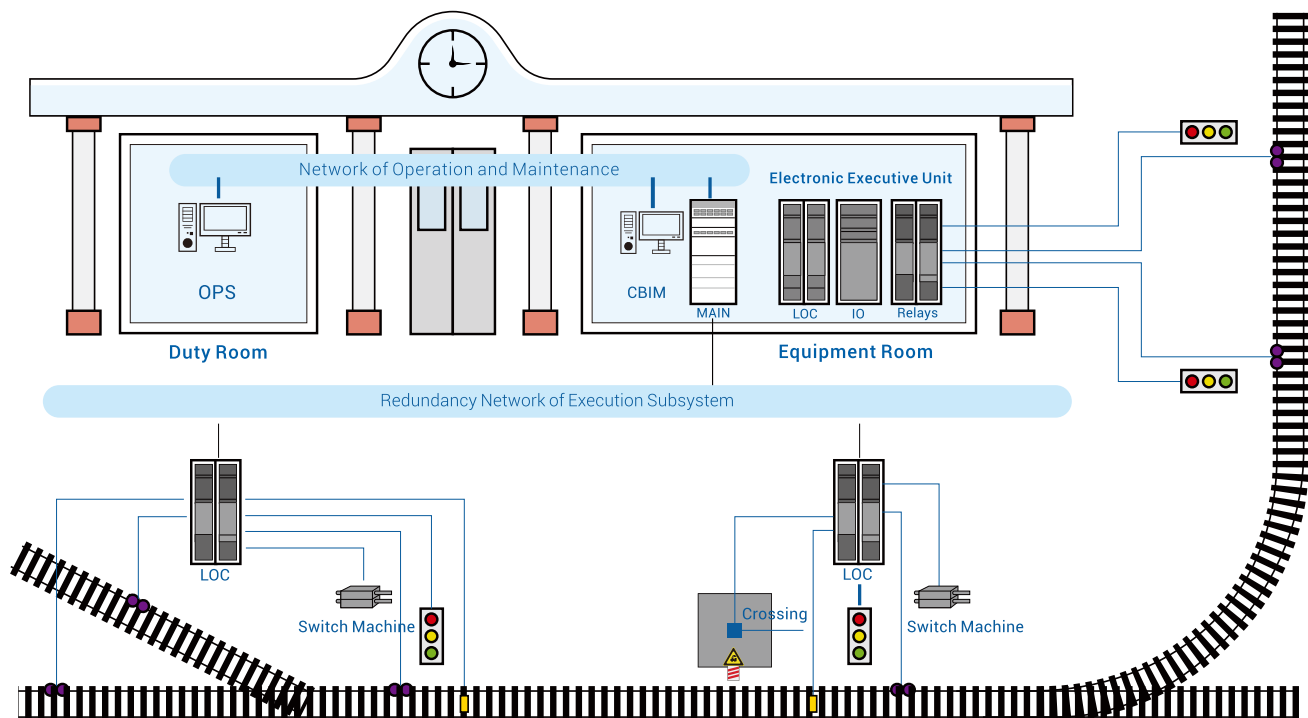
The interlocking system monitors and controls points, signals and level crossings, detects track section occupancy, sets routes, and guarantees safe operation.



HCI-1000 Interlocking

>> System Composition

The HCI-1000 interlocking system consists of interlocking logic subsystem (MAIN), execution subsystem, operating subsystem (OPS) and maintenance subsystem (CBIM). The execution subsystem may consist of one or more lineside object controller(s) (LOC) or relay interfaces (IO) or the combination of LOC and IO.



» Features



Safety

- "2×2oo2" Redundancy Structure ensures safety



Compatibility

- Support standard Ethernet interface, RS422 interface, CAN interface, Profi-DP interface
- The electronic executive module supports to interface with multiple trackside devices

Point Machine

Four-wire DC, three-phase four-wire AC and three-phase five-wire AC point machine

Track Circuit

480 AC track circuit and 25Hz/50Hz phase-sensitive track circuit

Interlocking between Yards/Stations

Cable-based yard/station information transmission with existing stations

Electronic Coding Control

Combining with electronic coding control devices for frequencies code controlling

Signal

Colour light signal and LED signal

Semi-automatic Block

Semi-automatic inter-station block control or axle counter-based automatic inter-station block control

Fragment Control

Level crossing, alarm monitoring and acquisition, and others



Reliability

- The electromagnetic compatibility and lightning protection performance comply with widely used international railway standards (including EN standards)



Applicability

- Support station operations of high-speed railways, conventional railways, metro lines and freight applications
- Support the centralized interlocking control of stations (yards) and zone interlocking control methods



Deliverability

- Mature configuration tools
- Complete simulation testing platform to shorten the project delivery cycle



Accessibility

- Support multi-language configuration, remote operation and users' centralized monitoring requirements

» References



HollySys provided self-developed Electric Interlocking to the **Passenger Rail Agency of South Africa (PRASA)** in the KwaZulu-Natal (KZN) Service Region.

196 Sets of Interlocking Systems

Widely Used in Mainline Railway and Special Lines for Factories and Mines



Hotan-Ruoqiang Railway

New generation train control system for the world's first railway loop line in the desert.



Kunming Airport Line

The first CBTC Airport Rapid Transit Line in China.

Tel: +86(10)-58981000
Email: railinfo@hollysys.com
Web: www.hollysys.com
Version: 2026.1



HollySys LinkedIn