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SECURITY SYSTEMS | EMR-HS ELECTRO-MECHANICAL ROAD BLOCKERS





## **GENERAL DESCRIPTION**

Optima EMR-HS electro-mechanical road blockers are designed especially for entrance points which have a threat of vehicle attack or for the ones that have high-security requirements. If there is a threat of vehicle attack in addition to the control of vehicle access in high-security applications, road blockers are the unique solution and the most secure systems. Even though the attack is from high tonnage vehicles with high speeds, the vehicle can't keep on moving because of the damage given to front, wheels and the bottom of the vehicle.

The drive unit is electro-mechanical, but in case of power failure, road blocker can be lowered or lifted manually with the help of a UPS, Typical raise/lower time is 5-6 seconds. With the help of Optima PLC (programmable logic control), raise/lower function can be achieved by every kind of card readers, biometric readers like fingerprint or hand shape, radio control, on/off key switch, etc. Besides, safety accessories like inductive loop detectors, flashing lights or red/ green traffic lights can be integrated into the system very easily. This electromechanical version offers the following advantages: safer thanks to torque control, easier to install and maintain, and environment-friendly.





## STEEL STRUCTURE

The electro-mechanical Roadblocker withstands a minimum of 50 tons of load per axle. The steel structure is sandblasted or can be hot-dip galvanized optional. Standard color is RAL1028 traffic yellow / RAL9005 black.

### ELECTRO-MECHANICAL POWER UNIT AND CONTROL ELECTRONICS

All the electro-mechanical components are to IP67 standard. Control electronics utilized in electro-mechanical road blocker is Optima PLC Two keyboards are standard; one desktop, other being integrated with the power unit. The motor is driven by a contractor and protected by a thermic breaker. The low current voltage required by the system is supplied by a switch-mode power supply. There is a fuse for every component in the system.

### ENVIRONMENTAL CONDITIONS AND POWER REQUIREMENT

Between -25°C and +65°C, 95% non-condensing humidity; 380V, three phase, 50-60Hz (or 220V/440V/etc., three phase, 50-60 Hz, optional by transformer).

## **OPTIONAL ACCESSORIES**

- Red/green traffic lights with a steel pole.
- Flashing lights in front of the road blocker.
- Dual vehicle safety loop detector.  $\Rightarrow$
- Protective construction(tubular) around the drive  $\Rightarrow$ unit.
- Transformer to convert the power.
- Submersible drainage pump.
- Wrong way alarm. **\rightarrow**
- High-speed alarm.  $\Rightarrow$

- Different colors.
- Hot dip galvanizing.
- SCADA or any control system: It is possible to change and check the position of road blocker with touch screen control panel, mobile devices (ios-android), computer, etc.

# MODELS

EMR-HS 14/7/20 - www.Optima.tc - the contents of this manual may change, at any time, and without notice. - Original instructions

- Raised height: From 500-1100 mm.
- Width: From 3000 to 4000mm.











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#### MAIN BODY MEASUREMENTS AND FOUNDATION





