



M720 Vehicle Count and Classifier

Detects vehicles as they pass over inductive loops embedded in the road surface

Golden River's technology is at the heart of many Intelligent Transportation Systems (ITS) for urban motorways or roads where accurate, reliable and economical detection systems are required.

ITS DETECTION SYSTEMS

The Golden River M720 is a fully integrated vehicle count and classification device optimised for 'fit and forget' detection, providing highly reliable and accurate data processing and incorporating fast and reliable ethernet communications. Housed in an industry standard 19" rack mount enclosure the unit is just 2U high (just over 90mm) enabling the unit to perform well in dense configurations at the roadside. When integrated with the MCentre instation it provides a highly reliable and automated solution to today's sophisticated ITS projects.

LOOP DETECTOR

The M720 supports 16 loops for detection and reports individual vehicle parameters including count, length, speed, gap, lane and direction ensuring traffic planners and road operators have the most detailed and accurate records to hand for their statistical and long term analysis.

SECURE AND RELIABLE - NO DATA LOSS

Data security and reliability is a key demand from operators collecting data from sophisticated ITS projects. The M720 includes facilities to provide a high level of user and system authentication and security checks to ensure that data cannot be tampered with nor corrupted, as the data is being processed in the outstation or transmitted back to base at the instation. The protocol is machine to machine and allows advanced automatic error correcting to be performed if communication links prove unstable.

NTP time server support ensures that the data is time stamped to a very high degree of accuracy and more importantly that the time synchronisation integrity between outstations on the same network can be easily and accurately maintained.



KEY BENEFITS

- Proven reliability and accuracy delivers dependable traffic data
- Simple integration with other units as designed to fit in standard equipment housings
- Cost effective management through remote management and data collection methods
- Wide range of report formats to allow integration with existing systems and analysis tools

KEY FEATURES

- Highly secure and reliable vehicle detection engine
 - 99% detect rate
 - 99% accuracy
 - 99% availability
- Network Time Protocol compliant
- 16 Channel integral loop detector
- Individual vehicle data including count, speed, length, headway and gap
- TCP/IP Ethernet as standard
- Advanced health monitoring
- Integral 5 day back up battery operation



SPECIFICATIONS

DIMENSIONS

19 inch rack mounted 2U height
260mm x 480mm x 90mm

OPERATING TEMPERATURE RANGE

-20°C to +70°C (-4°F to +158°F)

POWER

Mains 110V - 230V AC 50Hz

ELECTROMAGNETIC COMPATIBILITY

Tested to EN50293

BATTERY OPERATION

Depending upon application, up to 5 days battery operation via integral lead acid battery

INPUTS

16 loop sensors, user-programmable dimensions, 50m feeders

DATA OUTPUTS

Count, occupancy, gap, speed, length and headway

DATA STYLES

Interval, Vehicle-By-Vehicle, in user-selectable formats

MACHINE INTERFACE

Ethernet
RS232 up to 115,200 baud

UNITS

All common metric and imperial units available using interface software, e.g. Golden River MLink software

SOFTWARE

Remotely upgradeable and reconfigurable

STANDARD FEATURES

- HPLD card for enhanced accuracy and/or 200m feeders
- SigProfile for vehicle type classification
- Central instation software for data retrieval and control

The M720 is equipped with an integral battery enabling it to continue recording data if external power fails. The unit alerts you to the fault before shutting down communications to conserve power. Non-volatile SD card storage ensures that your data is preserved for later retrieval even if the reserve battery becomes depleted. The integral battery will even maintain the device recording operation for 5 days after power failure, having usefully sent a message to the instation alerting you to the power fault before shutting down communications.

COMMUNICATIONS

The M720 provides ethernet based TCP/IP communications as standard allowing robust, reliable and fast communication of data and configuration to and from the unit. This ensures that operators can retrieve the vast amounts of data now available quickly and reliably.

CONSTRUCTION AND GENERAL FEATURES

The sensor loops connect with simple and easy to wire plug connectors (supplied) which connect at the rear of the chassis. The ethernet connector also fits at the rear, alongside the AC mains connection.

At the front, a familiar DB9 RS232 connection is provided for local access. A set of LEDs indicate the status of communications to the instation, event and vehicle generation. The entire unit only consumes approximately 2 watts and generates very little waste heat, therefore reducing A/C requirements.

As with all Golden River equipment, the devices meet and are certified for all the appropriate standards.

MCENTRE

The M720 series includes advanced health monitoring features that allow the operation and performance of the equipment to be monitored in real time. The MCentre instation is automatically alerted to sensor and power faults, time synchronisation errors and if the configuration has been modified at the roadside. When connected to the instation the M720 provides data on the health and performance of the sensors and the equipment, which can be used to determine emerging failures or anomalies in operation and assist operators with planned maintenance visits.