



## ITS Systems

### M661/662 8/16 Loop Classifier



The Marksman 661/2 8/16 Loop Vehicle Classifiers are the most popular models from Golden River's ITS Systems Range. Used around the world for regional and national traffic data collection systems, they can be configured by the systems integrator or the user for almost any traffic monitoring applications using inductive loops.

The Marksman 661 is normally used to monitor 4 lanes of traffic, covering a dual carriageway trunk road or one direction of a motorway. Alternatively, for installation over eight lanes of traffic the Marksman 662 can be used. Eight accurate and reliable detectors form the heart of the system. Rapidly scanning each loop sensor, the M661 can report vehicle counts, speed, lengths and gap/headway in each lane.

In the past, applications have depended on binned data being collected weekly or monthly for historic purposes. With current demands for making the most out of the existing road infrastructure, the M661 can collect data on each vehicle compiling minute-by-minute interval files for transfer by packet based communications systems.

Because the loop detectors are integrated and under the control of a single processor, advanced algorithms are available to spot straddling vehicles and minimise data inaccuracy due to congested conditions.

In the past, 'N+1' configurations have been necessary to attain similar levels of performance. Whilst the M661 can accommodate legacy 'N+1' sites, it will give excellent results with 'N' arrays, reducing installation and maintenance costs.

Like all Golden River products, the M661 benefits from over 30 years of experience with roadside systems operating in most harsh conditions. Our systems last for many years due to their rugged construction and the use of plastic and aluminium throughout. Over 20,000 Marksman traffic recorders are in the field around the world, operating to an extremely high level in all traffic conditions.

Most Marksman ITS system components are installed with telemetry for control and data retrieval. The equipment is designed with this in mind, and comes as standard with no keyboard or display. The telemetry optional central station software complements the M661 perfectly and allows automated retrieval for historic data.

#### Key features

- ITS Systems component
- Second to none accuracy
- GR pedigree
- User programmable
- Unsurpassed flexibility
- Rugged and reliable
- GRPS language support
- Thousands of units deployed worldwide
- IP66 sealed, wide temperature range
- Lane-by-lane configurable (option)



**General Specifications**

**Size:** 250mm x 145 mm x 160mm

**Weight:** 5.0kg

**Temperature Range**  
Full operation -40°C to +85°C.

**Environmental Protection:** IP66

**EMC:** EN50293

**Autonomy**

Depending upon application, over 30 days without additional battery support is possible.

**Power**

Solar, mains and/or battery.

**Inputs**

8 or 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.

**Interface**

RS232 up to 115,200 baud

**Units**

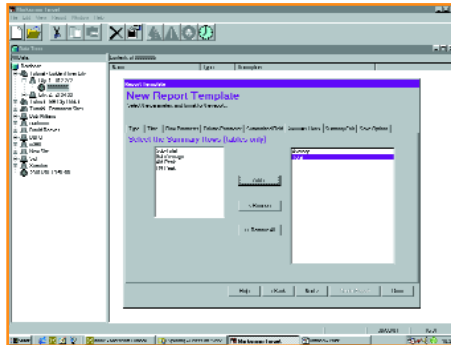
All common metric and imperial units user-selectable.

**Software**

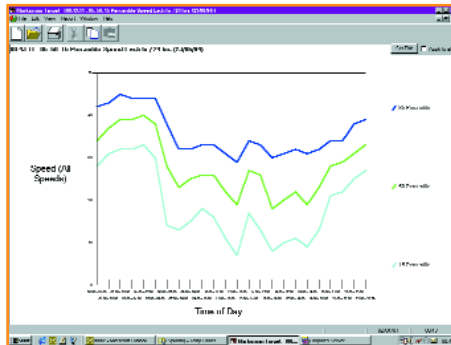
Remotely upgradeable and reconfigurable.

**Options and Accessories**

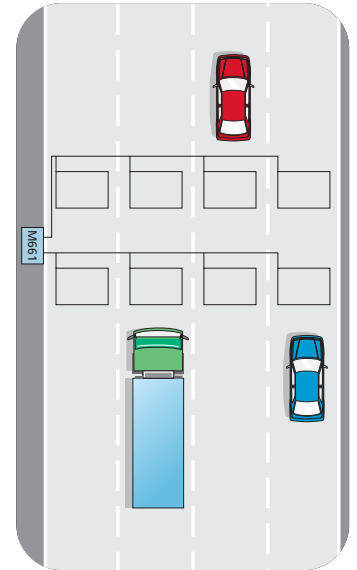
- Aluminium clamshell (for temporary sites)
- Keypad and Display
- Battery Charger
- Additional memory
- Switch card for external sensors
- Output card for external conditional control
- HPLD card for enhanced accuracy and/or 200m feeders
- SigProfile option for vehicle type classification
- Central station software for data retrieval and control.



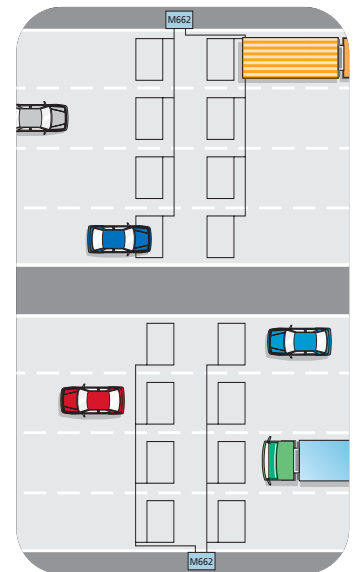
Custom Target template



85% percentile Speed plot



A typical 4-lane loop installation



A typical 8-lane loop installation (for long feeders, select the HPLD option)

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