

# DATA SHEET

# LifeMark®-100

## Automated Layout System



**THE LifeMark®-100 AUTOMATED LAYOUT SYSTEM** was designed specifically for the roadway stripers market. Using real-time kinematics (RTK) enhanced GPS-based location and machine vision camera technologies, this system provides stripers with the ability to accurately record the location of roadway markings before the roadway is repaved. Once the roadway is repaved, the original markings can then be duplicated in the same GPS location with workers safely off the road and out of harm's way.



**DURING THE RECORDING PROCESS**, the driver drives the lane to record the pavement marking location and patterns. As the vehicle moves along the lane the GPS location is determined by fixed machine vision camera systems. The GPS location of the markings and patterns are then stored in computer memory.



**TO REMARK THE RESURFACED ROADWAY**, the driver guides the paint vehicle along

the original path displayed by the computer. The computer then accurately controls the paint carriage via smart cylinders, accurately painting layout marks.



**THE OPERATOR** is safely seated within a vehicle throughout this process. For subsequent layout and/or striping, the roadway layout crews are eliminated, thereby increasing layout efficiency, decreasing labor costs and improving workers' safety.

### **THE LifeMark®-100 ADMINISTRATION PAGE**

allows operators and office personnel to view maps of roads that have been recorded in preparation for future paving. The Administration Page also allows users to drill down into a close-up satellite view to assist in planning complicated layout jobs. Complicated layout patterns are made easy using the LifeMark®-100. Data can be imported or exported using the Web Administration Page.





The LifeMark®-100 Automated Layout System consists of vehicle mounted environmentally protected camera systems for targeting the roadway markings, a GPS locating system employing RTK technology, an industrial computer for calculating the GPS location of the original roadway mark path location, and a supplemental carriage control system for accurately positioning the paint carriage over the original roadway mark path. Each LifeMark®-100 is custom built and goes through a burn-in period before installation.

## Single-Operator System Description

The single-operator system includes the LifeMark®-100 Automated Layout System for recording and layout of pavement markings along with a hydraulically actuated paint carriage and an electronic timing system mounted on a pickup truck. The LifeMark®-100 system is also available for mounting on a new or existing striping truck.

### Full LifeMark®-100 Automated Layout System, including:

- Truck-Mounted Front Control Cabinet
- Computer Enclosure Mounted in Cab or Truck Bed
- Antennas and Roof Rack
- Camera Systems

### Paint System, including:

- Hydraulic System
- Layout Paint System
- Paint Carriage

### On-site Training

**Pick-up truck not included. Ford F Series Superduty Diesel with PTO, or similar, recommended.**



## Installation Process

A vehicle is first inspected, and measurements taken at the owner's facility. Unique parts required for installation are fabricated by LimnTech Scientific. The LifeMark®-100 Automated Layout System and parts are then pre-staged prior to installation. Installation at LimnTech Scientific requires the vehicle be taken out-of-service for 8 days or less.

## Monthly Costs

**Maintenance Service Agreement:** \$200 per organization or Web Admin page, \$150 per truck system

**RTK Subscription Service:** Standard Smartnet RTK billed at \$0.21/minute while in use.

**Cellular Data Service:** from 0 to \$100 paid by customer

## Purchase Terms

\$50,000 down payment per system, due upon order, remainder due upon delivery.

