PAVEMENT MARKERS

www.usreflector.com
PAVEMENT MARKERS Adapting to todays demands for retroreflectivity.

Proven studies show that reflective road studs are among the most effective safety products in all adverse weather conditions. US Reflector Road Studs offer optimum lane identification in all weather conditions. They are visible and can be heard and felt, due to the rumble when a vehicle crosses them. Installed on thousands of miles of roadways throughout the world. Tire action facilitates the self-cleaning feature, keeping the reflective surface clean and brilliant. Road Studs offer a low cost alternative for enhancing roadways and turns. Retroreflection increases visibility which, in turn, increases safety.

STREET LEVEL MARKERS

TCB-1

TCB-1 pavement markers are designed with a high power reflective lens set into a non aggressive rounded shoulder incline for smooth roll over.

The TCB-1 is shatter proof, with a special hard coat protecting the prismatic lens from abrasion. Angled prisms provide optimum night visibility.

TCB-1 Pavement studs are available in single and double sided reflective lens.

Colored housing with matching lens for day time visibility.

Color: white, amber, blue, green and red. Combinations: red-amber, red-white.

Adhesion: Stick-fast instant pre-cut Butyl pads, Hot melt or adhesive can be used.

45 Glass elements per side

DIMENSIONS
Length 4" Width 4" Height 0.75"

TCB-5

Highly reflective “Cat’s Eye” road studs reflect light similar to “LED” type lighting.

The TCB-5 provides durability and longevity when installed in areas of significant traffic flow or in dry, sandy climates. Shatter proof, the TCB-5 outlasts most markers by its unique one piece design. Manufactured with 45 glass elements on each face for optimum visibility.

TCB-5 has recessed “grabbers” for easy installation. Colors: white, amber, blue, green and red fluorescent yellow.

TCB-5 pavement studs are available in single or double sided lens units.

45 Glass elements per side

DIMENSIONS
Length 3.94" Width 3.94" Height 0.7"

TCB-10 City Studs are designed for both permanent and temporary applications such as curbs, bridges, tunnels, and rotaries. Divide bus and taxi lanes from free-flow traffic.

Highly visible oversize markers define roadsides by its 179 glass element count. Single or double sided, with or without metal supports.

Bonds perfectly to asphalt and concrete surfaces.

DIMENSIONS
Length 8.6" Width 3.94" Height 1.57"

PAVEMENT MARKERS

STREET LEVEL MARKERS

TCB-10

City Studs are designed for both permanent and temporary applications such as curbs, bridges, tunnels, and rotaries. Divide bus and taxi lanes from free-flow traffic.

Highly visible oversize markers define roadsides by its 179 glass element count. Single or double sided, with or without metal supports.

Bonds perfectly to asphalt and concrete surfaces.

DIMENSIONS
Length 8.6" Width 8.6" Height 1.57"

STREET LEVEL MARKERS

TCB-15

Lane Dividers are temporary delineators that provide excellent day/night time warning guidance to road users. Equipped with a rubber shaft adding a reliable means to stop dangerous lane changing. Absolutely traversable, even in heavy traffic areas. Single or double sided. With or without rubber shaft. Shaft equipped with stud reflector for enhanced visibility.

TCB-15 Delineators are available with metal supports for additional anchoring strength in sensitive areas.

Divider stud without rubber shaft.

DIMENSIONS
Length 8.6" Width 5.9" Height 11.2"

Colors: white, amber, blue, green and red. Combinations: red-amber, red-white.
Aluminum pavement markers provide extreme durability for sensitive areas. Aluminum Road Studs are designed to resist extreme impacts, providing a long-lasting, durable road stud for all applications. Road studs are the most effective safety device for night time guidance even under the most adverse weather conditions. Studs are visible and can be heard and felt due to the rumble generated when a vehicle crosses them. Reflective road studs provide optimum lane indication when visibility is dramatically reduced.

Aluminum studs are available in two (2) sizes. The reinforcement stem ensures a precise anchoring position for the stud.

**PARKING GARAGE MARKERS**

Plastic markers have 2 cat's eye reflectors back to back for maximum visibility. Designed specifically for parking garages with a 360 degree rollover capability that resists tire twists when subjected to top dead center tire movements. Illuminate and mark passageways and parking places. Identify areas were striping is non-existent or worn out. Focus driver’s attention in sensitive areas with a “Rumble” type noise.

PGM Markers can be installed using “Quick Stick” butyl adhesive pads or adhesive.

**MINI CURB MARKERS**

Plastic curb markers are equipped with 8 cat’s eye reflectors on each side for increased night visibility. With a height of only 0.39 inches, MCM marker projects a brilliant light reflex enhancing curbs and medians in all weather conditions. Extremely resistant to all outside aggressive forces, mini markers install in seconds utilizing adhesive or Quick stick butyl pads. Illuminate and mark passageways for vehicles and pedestrians. Available in white and yellow, single or double sided.

**DIMENSIONS**

- **MCM**
  - Length: 2.07”
  - Width: 1.3
  - Height: 0.38

**ALUMINUM STUDS**

- **TCB-A1**
  - Dimensions: Length 3.94” Width 3.94 Height 0.78
  - Aluminum body stud with shank. Available in single or double sided reflective faces.
  - Standard size
  - 43 Glass elements per side

- **TCB-A2**
  - Dimensions: Length 3.94” Width 3.94 Height 0.78
  - Aluminum body stud with shank. Available in single or double sided reflective faces.
  - Standard size
  - 21 Glass elements per side

- **TCB-A3**
  - Dimensions: Length 5.88” Width 5.88 Height 1.06
  - Aluminum body stud with shank. Available in single or double sided reflective faces.
  - Wide sided stud
  - 28 Glass elements per side

- **TCB-A4**
  - Dimensions: Length 5.88” Width 5.88 Height 1.06
  - Aluminum body stud with shank. Available in single or double sided reflective faces.
  - Wide sided stud
  - 39 Glass elements per side

**PARKING GARAGE MARKERS**

- **PGM**
  - Dimensions: Ø 4.7” Height 0.75”

**MINI CURB MARKERS**

- **MCM**
  - Dimensions: Length 2.07” Width 1.3 Height 0.38

**Prices reflect single units only, please contact your sales representative for quantity pricing**

WWW.USREFLECTOR.COM
ARMORSTUD
Optical 360 Degree reflective pavement markers

PAVEMENT MARKERS

Armorstud optical reflective road markers are constructed from high quality hardened glass, a material that is harder than steel, offering enhanced mechanical properties exceeding 38 tons. Optical Toughened glass reflective road stud technology combines incoming light signals then projects a focal beam of light from its reflective core directly back to the driver. ARMORSTUD pavement markers provide unmatched abrasion and wear characteristics when compared to plastic pavement markers. Two models are available, 360° Standard and 360° Flat Top. Markers can be used for center lane markings, merging lanes, winding roadways, stop lines, arrows, intersection markings, raised curbing and any area where a reflective marker would enhance safety. Both markers share the same optical reflex technology setting a new standard for the pavement marking industry. Developed for the essential needs of tomorrow’s growing roadway systems.

360° STANDARD MODEL

Dimensions: 4 x 1.7 inches
Armorstud’s 360° unidirectional optical reflex technology reflects light back to its projected source from any area with in its 360 degree radius. Armorstud’s optical reflex characteristics provide winding roads and turns a distinct visible marking system for all oncoming motorists.

180° STANDARD MODEL

Dimensions: 4 x 1.7 inches
Armorstud’s 180° mono directional optical reflex technology enables the stud to perform from half of its exposed surface. The opposite side of the marker absorbs entering light beams with no return. Armorstud’s mono directional properties act as a single sided pavement marker providing additional entrance angles up to 180 degrees from face front.

360° FLAT TOP

Dimensions: 4 x 1.7 inches
Armorstud’s flat top markers are a low profile marker for areas where low rumble and two vehicle traffic is frequent. Flat Top markers optical dome protrudes from its installed position only 1/2 inch. Flat Top markers have identical optical reflective characteristics as the Standard model.

ARMORSTUD 360° Optical technology illuminates and defines dark and winding roads

APPLICATIONS

► Sleek compact design
► Approaching 360° visibility
► Toughened glass
► Compact design
► Self cleaning lens
► Precise optical light reflex
► Guaranteed 5 years

CHARACTERISTICS

► Optical tempered glass
► Mechanical strength >38 ton
► 360°, 180° and bi-color characteristics
► Optical reflection 268 cd/ft² at 0.3°
► 360/180-RM dimensions: 4 x 1.7”
► 360 FT dimensions: 4 x 1.4 inches

RECYCLABLE

BENEFITS

► Drill
► Adhesive
► Insert
► Complete

ARMorstud is the only marker available today that virtually designates roadway intersections centers for all motorists. A technological break through in road markings.

Item numbers

<table>
<thead>
<tr>
<th>Item</th>
<th>360°</th>
<th>180°</th>
<th>360-FT</th>
<th>Bi-Color</th>
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</thead>
<tbody>
<tr>
<td>360-RM1-color</td>
<td>180-RM1-color</td>
<td>360-FT1-color</td>
<td>360-RM2-color-color</td>
<td></td>
</tr>
</tbody>
</table>

Colors white (W), Amber (A) Yellow (Y) Red (R) Blue (B) Green (G)

Bi-colors Red/white (RW) Red/amber (RA)

* Please contact your sales representative for quantity pricing

www.usreflector.com
Solar powered L.E.D. active pavement markers for enhanced visibility.

L.E.D. active solar pavement markers offer outstanding clarity and visibility. Crystal clear toughened glass optical shell provides unparalleled visual appearance and performance. With a strength resistance exceeding 18 tons, and shock resistance of over 14.75 ft. lbs, the Solar Armor Stud is durable, long lasting and self-cleaning. Utilizing the latest in solar and reflective technology, Armor Stud has the ability to function with an impulse flash effect or a constant burn while its built-in, passive micro prism technology responds to all road situations, day or night, even if the diodes are in a passive mode.

CHARACTERISTICS
- Optical tempered glass delivers perfect visible light reflex.
- Automatic light detection triggers L.E.D. components.
- 5 night operation needs a charge of only 8 hours.
- Sleek compact design
- Dimensions: 4.09 x 1.89 x 0.74 inches
- Quick easy installation with bituminous or other compatible adhesive.

BENEFITS
- Visible from 430 to 1094 yards
- Compact design
- Automatic L.E.D. trigger
- Guaranteed 5 years
- Optical Toughened glass shell
- Self cleaning

TECHNICAL CHARACTERISTICS
- Solar panel: Monocrystalline
- Accumulator type: 110 mA / 5 day charge
- Diodes: 0.1969 in. / 5mm
- Luminosity: >4000 mcd
- Flash Frequency: 1.6 hz
- Minimum current: 0.15 mA
- Impulse flash current: 20 mA
- Flash duration: 3.7 ms

INSTALLATION
- Drill
- Adhesive
- Insert
- Complete

In case of an accident resulting in the destruction of the marker, the Armorstud, with its toughened glass optical shell, will break into little pieces comparable to a lateral window on a vehicle. This type of material should not represent a potential threat for tire puncture or injury to a person who has fallen on the broken elements.

<table>
<thead>
<tr>
<th>ITEM #</th>
<th>DESCRIPTION</th>
<th>Light</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>MK6-SB-1-color</td>
<td>Single sided Solar power pavement stud</td>
<td>Blinking</td>
<td>$</td>
</tr>
<tr>
<td>MK6-SC-1-color</td>
<td>Single sided Solar activated pavement stud</td>
<td>Blinking</td>
<td>$</td>
</tr>
<tr>
<td>MK6-SB-2-color</td>
<td>Double sided Solar power pavement stud</td>
<td>Constant</td>
<td>$</td>
</tr>
<tr>
<td>MK6-SC-2-color</td>
<td>Double sided Solar activated pavement stud</td>
<td>Constant</td>
<td>$</td>
</tr>
</tbody>
</table>

Prices reflect single units only, please contact your sales representative for quantity pricing.
**DESCRIPTION**
MK-6 markers are a self concealed L.E.D. marker for all types of roadways such as rotaries, dangerous curbs, toll booths, borders, approaching pedestrian passageways, highway exits and intersections.

MK-6 Markers stand apart from classic road markings by utilizing solar energy as its power source and having the simplicity to choose how bright the marker should be and how it flashes, even if a sustained burn is required.

**BENEFITS**
- Low tension 0.4 watt, 1 watt and 3 watt LED markers are visible from 360° which is ideally suited for round about markings providing absolute day & night time visibility.
- MK-6 markers function either in auto synchronized flash mode or continuous mode working proficiently in sunny areas as well as in darker areas.
- A safe solution to urban lighting installations in case of breakdown.
- Available light sensor technology for automatic functioning.

**TECHNICAL**
Function power: 12 or 24 watt
Low tension cable with a “Clip and Go” connecting system in which no specific tooling is required.

**CHARACTERISTICS**
- Resists 16 tons
- Life span 100,000 hours
- 12 or 24 volts

**Other applications:**
- Airports
- Parks
- Leisure Areas
- Landscaping
- Bus Stops
- Dockyards
- Ships
- Driveways
- Railways
- Pedestrian & Industrial pathways
- Loading docs

**Power**
MK-6 markers can be independently powered using a central solar energy power system using panels and accumulators. Alternatively a direct hard wire to on site power source may be used.

For more information please contact your sales representative or US Reflector
Toll Free: 800 414-5024 / www.usreflector.com
MK-6 Installation on concrete barriers

**INSTALLATION**

Recommended installation:

1. Coring the concrete barrier ¾” deep x 4¾” wide (20mm x 120 mm of diameter)
2. Drilling 1” diameter at the core center and piercing the concrete barrier. (25mm)
3. Connect the stud to the supply cable which is set behind the concrete barrier.
4. The central power can be provided by a solar panel or by connecting to a local power source.

<table>
<thead>
<tr>
<th>Technical data</th>
</tr>
</thead>
<tbody>
<tr>
<td>• MK6</td>
</tr>
<tr>
<td>• LED Quantity</td>
</tr>
<tr>
<td>• LED Color</td>
</tr>
<tr>
<td>• Lifespan</td>
</tr>
<tr>
<td>• Light power available</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>• Mechanical resistance</td>
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<tr>
<td>• Power Function:</td>
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</tr>
<tr>
<td>• Power</td>
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<tr>
<td></td>
</tr>
<tr>
<td>• Installation</td>
</tr>
<tr>
<td>• Diameter of drilling</td>
</tr>
<tr>
<td>• Recommended glue</td>
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<tr>
<td>• Recommended distances between each stud</td>
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<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>• Studs connection</td>
</tr>
</tbody>
</table>
**OPTI-CURB**

**Optical 360 Degree reflective curb markers**

**CURB MARKERS**

Opti-Curb 360° Optical reflective curb markers are a maintenance free permanent traffic control device designed to last the life of a curb. Illuminate and define raised medians, curbs, islands, rotaries and merging lanes with **TOTAL LIGHT FUNCTIONING**.

Opti-CURB toughened glass curb markers have been exclusively developed to illuminate and outline all types of concrete and stone curbing.

Opti-curb stud markers are visible from any oncoming direction identifying the presence of curbs and straightaways for approaching motorists regardless of their oncoming direction of travel. Available in white, red, green and blue.

**Optical Reflex Function**

Omni-Reactional reflex is based on four main elements:

- A. Entrance Angle
- B. Mirror
- C. Optical dome
- D. Foot

The Incidence Surface, protruding over the curb receives the light beams from approaching vehicles.

The entrance angle of light entering the Omni-reactional lens (a), is redirected to a specific area of the metallized reflector acting as a MIRROR (b). The beam of light is then reflected back to the entrance angles source of light using the optical dome as a light pivot point. (c).

The FOOT (d) supports the mirror projection lens and acts as an anchor support. This new reflex technology provides the driver with a precise and efficient light signal, even under wet conditions.

**CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
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<tbody>
<tr>
<td>Weight</td>
<td>6.2 oz.</td>
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<tr>
<td>Height/ width</td>
<td>1.9 x 1.9</td>
</tr>
<tr>
<td>Material</td>
<td>Tempered glass</td>
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<tr>
<td>Mechanical Strength</td>
<td>&gt;15 Tons</td>
</tr>
<tr>
<td>Removal force</td>
<td>110 lbs</td>
</tr>
<tr>
<td>Installation</td>
<td>Mechanical</td>
</tr>
<tr>
<td>Optical principle</td>
<td>Reflector</td>
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<tr>
<td>Reflection type</td>
<td>Omni-reactional</td>
</tr>
</tbody>
</table>

**Item numbers**

- 300–GC-W
- 300–GC-R
- 300–GC-G
- 300–GC-B

**Colors**

- White
- Red
- Green
- Blue

* Please contact your sales representative for quantity pricing

**OPTI-CURB 360° Optical Reflective technology illuminates and defines dark and winding roads**

Opti-CURB markers provide 360 degree visibility outlining all types of concrete and stone curbing.

- Visible from any oncoming direction.
- OPTI-CURB is safe as tempered glass with mechanical properties harder than steel
- Opti-CURB markers reinforce the presence of curbs and straightaways for approaching motorists regardless of their entrance direction.
- Cutting edge maintenance free optical curb markers with Total Light Functioning, designed to illuminate raised curbing permanently.

**Compact, 2 square inches**

Opti-CURB’S compact size allows installation in less than 2 minutes when utilizing Holotool. Opti-curb is equipped with a special rubber housing with anchor lip eliminating the need for adhesives.

Opti-Curb reflective curb markers are constructed from high quality hardened glass, a material that is harder than steel, offering excellent resistance to severe outside aggressions and exceptional outlining of raised curbing.

Opti-CURB’s smooth surface allows it to be self-cleaning. Mechanical properties provide outstanding strength, durability and wear resistance when compared to plastic marker systems.

**RECYCLABLE**

www.usreflector.com
Illuminate raised curbing and medians with high profile Island Beacons. Island Beacon functions as a highly reflective, oversized pavement marker. Designed to withstand vehicle roll overs, Island Beacons provide day/night visibility for all approaching vehicles. Beacons may be placed in front of “KEEP RIGHT” signs reducing vehicle / curb impacts. Designate entrance points quickly and effectively. Installation requires lag bolts or adhesive for installation. Island Beacon is equipped with 8 “Cat’s Eye” reflectors. All standard are colors available.

**Island Beacons**

- **IB1-W**
  - White Reflectors
- **IB1-OG**
  - Orange and Green Reflectors

Island Beacons can be installed onto any type of raised surface for enhanced identification. Use Island Beacons to indentify entrance and exit points or to designate specific maintenance areas.

Island Beacons are constructed from A.B.S. materials for strength and durability. Built to resist truck and vehicle impact rollovers without destruction of the beacon or its reflective lenses.

Island Beacon is equipped with 8 High Power prismatic reflectors for maximum visibility.

Reflectors are available in White, Yellow, Orange, Green, Blue and Red.

**Specifications**

- **Length:** 7.8"
- **Width:** 7.8"
- **Height:** 4"
- **Weight:** 3.13 lbs
- **Reflectors:** 4, 1.5 x 7 in.
  - 4 Trapezoids

**Costs**

<table>
<thead>
<tr>
<th>ITEM #</th>
<th>DESCRIPTION</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>0300-IB1-W</td>
<td>White reflective island beacon</td>
<td>$</td>
</tr>
<tr>
<td>0300-IB1-O</td>
<td>Orange reflective island beacon</td>
<td>$</td>
</tr>
<tr>
<td>0300-IB1-R</td>
<td>Red reflective island beacon</td>
<td>$</td>
</tr>
<tr>
<td>0300-IB1-OG</td>
<td>Orange and green reflective island beacon</td>
<td>$</td>
</tr>
</tbody>
</table>

**SAFETY & PREVENTION**

Island Beacons do not require an electrical connection. They are visible from a great distance due to their High Reflecting Power and assure maximum nighttime safety. As motorists approach islands or intersections, their presence permits drivers to navigate those areas safely.

**MULTIPLE COLOR CONFIGURATIONS AVAILABLE**

Island Beacons can be color configured for specific safety applications. Easily replace reflectors with rivets or screws.
GUIDESTAR SOLAR LED PAVEMENT MARKERS

GSX Series
Illuminating tomorrows roadways TODAY

- Clean reusable energy
- Automatic flashing or constant ON
- Over 30Ton compression strength
- Ultra intense 3X LED’s
- External magnet switch stores power
- Quick easy installation
- No maintenance required
- No batteries to change ever
- Designed for daily traffic abuse
- Improve lane visibility in congested areas
- Bring modern road technology to non visible or worn out markings

GSX LED Solar Markers are the most effective marking system in the industry providing a visible, audible, noise warning device for all drivers and roadways. Designed to provide motorists advanced visibility and alert them of danger such as wrong-way, center lines, turns, fire hydrants and all other applications requiring enhanced visibility.

US Reflector’s GSX solar road markers are designed with recessed lenses that are built from the inside of the marker providing exceptional reflective life performance while reducing tire lens impact when compared to standard markers. No maintenance required, LED markers are built with intelligent and sophisticated circuitry and powered with the advanced technology providing low electric consumption and exceptional operating life. GSX markers are equipped with external magnet switch that activates the marker when being installed.

www.usreflector.com
GUIDESTAR®

CHARACTERISTICS
- Extreme 30 ton Resistance
- Illumination >110 hours
- Solar powered
- Smooth aluminum frame
- Adhesive or anchor

BENEFITS
- Self Illuminating
- Advance Hazard warning
- Quick install

GSX SERIES
GuideStar GSX pavement markers are a high power ultra bright LED marker designed for performance in abusive road environments. GSX series leaps forward in technology with its IONintel power chip package providing more than 51 hours operation with just 4 hours of sunlight + 30 tons of compression resistance and over a mile of advanced night visibility making the GSX markers the new standard to road illumination.

Reflectors are secured from inside the marker frame

3X the LED’s exceed standards for brilliant night visibility

Heavy Duty aluminum frame

Ergonomic Smooth edge design

IONintel solar panel and chip electronics package

Anchor holes or adhesive bond for dual fixation

External power storage switch for on-site activation

GSX-4 Double sided GSX-2 Single sided
GSX-6 Double sided GSX-3 Single sided
GSX-ST3 Double sided GSX-ST6 Single sided

High powered light diodes draw, but not distract from the driver’s attention to the road. LED Diodes are combined with a prismatic reflector for passive reflex technology. Maximize a drivers ability to maneuver through dark spots, dangerous areas or wet roads. Cost effective, easy to install and maintenance-free.
Effective Warning

LED lights are the best option for road markers because they provide a significant increase in advance warning for drivers. GSX LED markers with IONintel chip electronics use very little energy, and provide the utmost in safety and visibility. Unlike conventional reflective markers, the GuideStar LED Solar marker is visible up to a mile away and beyond helping to prevent accidents. GSX dual illumination Markers emit and reflect light which is extremely important especially on road sections that are unable to pickup an approaching headlight beam especially in wet and rainy weather.

Blue LED markers are ideal for fire hydrant locator’s. Alternating blue flashing LED’s directs attention when searching for hydrants is critical. Installs on curbs or roadways.

<table>
<thead>
<tr>
<th>Part #</th>
<th>Description</th>
<th>Light Mode</th>
<th>AVAILABLE LED COLOR OPTIONS</th>
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<tbody>
<tr>
<td>2I-GSX-A4-color-color-(Mode)</td>
<td>Double sided 4 LED marker</td>
<td>F</td>
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<tr>
<td></td>
<td></td>
<td>X</td>
<td>Red</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>Blue</td>
</tr>
<tr>
<td>2I-GSX-ST-A3-color</td>
<td>Single sided Stem 3 LED marker</td>
<td>F</td>
<td>Flashing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NF</td>
<td>Non Flashing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>White</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>Red</td>
</tr>
<tr>
<td></td>
<td></td>
<td>X</td>
<td>Blue</td>
</tr>
</tbody>
</table>
GSX-2 / GSX-4
Self contained solar pavement marker is available in single or double sided. Built with aluminum housing with embedded reflector and 2 or 4 LED illumination provides high visibility up to 1 mile (1600m). Smooth sand blasted curved surface for long life wheel impacts. IP68 waterproof electronic integration ensures power chips & power supply are fully protected from water and contaminates. Delivered with external magnet switch for “On-site” activation.

Dimensions: 4” x 4.4” x 0.86” (101 x 112 x 22 mm)
Illumination modes: Flashing or Always ON
Compression resistance: 25 Tons

GSX-3 / GSX-6
High visibility Solar LED Road Marker employs a heavy duty aluminum design that is long lasting, impact resistant, and engineered to survive in virtually any weather condition. Self contained solar pavement marker is available in single or double sided. Built with embedded reflector with 3 or 6 LED’s provides exceptional visibility greater than 1 mile (1600m). Smooth sand blasted curved surface for long life wheel impacts. IP68 waterproofing ensures electronic chips & power supply are fully protected from water and road contaminates. Delivered with external magnet switch for “On-site” activation.

Dimensions: 4.9” x 4” x 1” (125 x 105 x 26mm)
Illumination modes: Flashing or Always ON
Compression resistance: >30 Tons

GSX-ST3 / GSX-ST6
Heavy Duty aluminum housing with self contained solar LED Road Marker is designed with an anchor stem for roads where vehicles brake-speed such as toll booths, winding roadways, merging lanes, sharp turns, truck lanes and parking lots where pivoting tires may pull off surface mount studs. Long lasting, and impact resistant, the GSX Series is engineered to survive in virtually all weather conditions. GSX-ST series marker is available in single or double sided, flashing or constant ON. Embedded reflector with 3 or 6 LED’s provides exceptional visibility greater than 1 mile (1600m). Smooth sand blasted curved surface for long life wheel impacts. IP68 waterproofing ensures electronic chips & power supply are fully protected from water and road contaminates. Delivered with external magnet switch for “On-site” activation.

Dimensions: 4.9” x 4” x 1” (125 x 105 x 26mm)
Illumination modes: Flashing or Always ON
Compression resistance: >30 Tons
GSX marks are available in all configurations. Use first letter of color when ordering.
The MEGALUX P1 is a high powered LED marker light designed to be visible during the day and night. Super strong structure designed to withstand heavy traffic circulation including heavy trucks.

**APPLICATIONS**

- Dynamic road markings
- Redistribution of traffic lanes
- Toll Booth advance warning lights
- Tunnels and covered roadways
- Dangerous turns
- Bicycle lanes
- Pedestrian crosswalks
- Wrong way markings
CHARACTERISTICS
- High powered LED's emit visible light in sunlight.
- Resistance to high traffic.
- Low voltage between 12V and 48V.
- Ability to install markers over long distances.
- Markers are delivered with individual connectors and “Vampire” connectors with flat BUS Cable.

ADVANTAGES
- Excellent day performance and night visibility.
- Even with voltage line losses the light output is not affected.
- MEGALUX P1 Power Advantages.
- Long life with very low consumption (eg 9 LED’s have the power of 100 watt Lumen produce as much light as a 50 watt halogen bulb).
- The marker ears guarantee stability and prevent deflection and rotation of the stud. Thus, the alignment of studs remains optimal.
- Marker is tested under IP68 for waterproofing and electronic module protection.
  (Electronics are placed in 3 feet of water for 3 months with 3% of salt).

TECHNICAL DATA

<table>
<thead>
<tr>
<th>MATERIAL</th>
<th>Body : Aluminum / Lens : Polycarbonate</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIMENSIONS</td>
<td>Diameter : 5.9” (150mm) / Height : 1.9” (50mm)</td>
</tr>
<tr>
<td>WEIGHTS</td>
<td>2.75 Kg (1.25 kg)</td>
</tr>
<tr>
<td>INSTALLATION</td>
<td>0.19” (5 mm)</td>
</tr>
<tr>
<td>FIXATION</td>
<td>Adhesive resin in cavity diameter 6.3” x 2” (162 mm x 52 mm)</td>
</tr>
<tr>
<td>OPTICS</td>
<td>Power LEDs with collimating reflectors</td>
</tr>
<tr>
<td>OPTICAL EFFICIENCY</td>
<td>Controllable light output and adaptable customer applications</td>
</tr>
<tr>
<td>COLORS</td>
<td>White, red, blue and amber</td>
</tr>
<tr>
<td>WORKING LIFE</td>
<td>LEDs &gt; 50 000 hours</td>
</tr>
<tr>
<td>LED QUANTITY</td>
<td>Mono directional : 3 LEDs - Bi-directional : 2x3 LEDs</td>
</tr>
<tr>
<td>QUALITY</td>
<td>COMPRESSION / IMPACT RESISTANCE : &gt; 40 Tonnes / 25 Joules</td>
</tr>
<tr>
<td>WATERPROOFING</td>
<td>IP68 (encapsulated electronic module IP68)</td>
</tr>
<tr>
<td>SEALING</td>
<td>2 years under normal installation and use</td>
</tr>
<tr>
<td>ELECTRIC</td>
<td>VOLTAGE : 12 to 48 volts</td>
</tr>
<tr>
<td>CABLE CONNECTOR</td>
<td>2x1.5mm2 type ASIBUS (vampire connector)</td>
</tr>
<tr>
<td>POWER</td>
<td>Mono directional &lt; 4.5 watt - Bi-directional &lt; 6.5 watt</td>
</tr>
</tbody>
</table>

www.usreflector.com
US Reflector Flush Mounted LED pavement markers offer bright day and night visibility for pedestrian and motorists.

Snow plowable LED markers are available in self sustaining rechargeable solar power as well as 12 or 24 volt low voltage that can be powered from a solar grid or electricity.

For more information please contact your sales representative or US Reflector
Toll Free: 800 414-5024 / www.usreflector.com

Illuminate & define crosswalks, dangerous turns and roadways with ultra bright LED flush-mount snowplowable pavement markers

US Reflector Flush Mounted LED pavement markers offer bright day and night visibility for pedestrian and motorists.

Snow plowable LED markers are available in self sustaining rechargeable solar power as well as 12 or 24 volt low voltage that can be powered from a solar grid or electricity.

Independent Self Powered Solar LED Markers
LED flush-mounted Solar Powered markers illuminate and identify crosswalks, roadways, dangerous turns and just about any application that requires vehicle and pedestrian guidance. Maintenance free easy to install. Activation is automatic delineating roadways during darkness, reducing accidents especially during fog, rain and surface spray.

LED Direct Powered Markers (Optional Solar Power)
High Power LED in ground street lighting system directs and controls vehicles and pedestrians both day and night. Intelligent light module activates and controls lights intensity & flashing modes. Activate lights with movement detectors, radar detectors, fog sensors, buttons and telecommunication. Easy to install maintenance free high intensity pavement markers reduce accidents and save lives. Available with two colors per side for visual access control

For more information please contact your sales representative or US Reflector
Toll Free: 800 414-5024 / www.usreflector.com
US Reflector Guide Star road studs provide motorists advanced visibility and awareness of winding roadways and dangerous turns by providing over 30 seconds of reaction time when compared to 3.2 seconds for conventional retro-reflective road studs at 62 mph (100 km/h). Proven to reduce accidents and save lives by over 70%, LED road markers are solid state and provide years of maintenance free function ability.

Unlike retro-reflective markers, LED’s increase driver visibility in rain, fog and wet surface spray conditions where traditional retro-reflective road markings are less visible. Guide Star Solar LED Illuminated road markers have built in light sensors which automatically activate the LED’s at dusk and shut off at sunrise ensuring the road is visible throughout the night.

Guide Star LED embedded studs are more robust and durable than traditional surface mount markers providing years of maintenance free operation reducing the costs of continuous surface mount marker replacement.

GUIDESTAR RECESSED LED PAVEMENT MARKERS

- **Guide-Star XL**
  - High power fully controllable remote activation LED markers

- **Guide-Star NLK**
  - Single or double sided flush mount Solar powered LED pavement marker with oncoming light sensor detection for crosswalks & dangerous turns.

- **Guide-Star NLC**
  - Clear flush mount solar LED marker for all roadways that require recessed LED marker lighting

- **Guide-Star NLW**
  - Surface mount LED marker for all roadways that require recessed LED marker lighting.

For more information please contact your sales representative or US Reflector
Toll Free: 800 414-5024 / www.usreflector.com
Guide-Star NLK Independent high power solar LED pavement markers

CHARACTERISTICS
INDEPENDENT SOLAR L.E.D snow plowable markers are a flush mounted pavement marker that can be used on all roads that may or not be subjected to snow plows. Optical light bar directs L.E.D. lights up into the direction of approaching vehicles alerting vehicles of crosswalks, dangerous turns, intersections and merging lanes. Use for highway exits arrows and any other sensitive areas that require enhanced visibility.

High visibility LEDs help ensure safe driving at night. Easy to install and maintenance-free NLK snow plowable solar markers require no electrical wiring. High performance capacitors along with a complete waterproof packaging ensures long-term maintenance free performance after installation for 7 + years. Environmentally friendly, Only clean solar energy is used and no hazardous materials are present in the marker.

NLK markers are constructed of heavy duty non-corrosive cover with a poly carbonate optical lens driving the LED up and into the direction of oncoming vehicles.

Applications: Dangerous turns Intersections Stop lights Security points Crosswalks Exit ramp arrows

Installed into the road surface with core digging. Designed to be driven over and withstand intensive and repetitive forces. Small protuberance (1.5~5 mm) minimizes any disturbance to driver when driven over. Special optical design of the lens provides optimum visibility at long distance and horizontal angle. (Average approach visibility 100 yards)

NLK-LS type Crosswalk markers
Built in light sensor detects oncoming vehicle headlights triggering LEDs ‘for advance warning.

CROSSWALK FUNCTION METHOD
The NLK-LS marker will pulsate with a single repeating flash until the marker detects lights from an oncoming vehicle. Once lights are detected, all 3 LED’s in the NLK-LS marker illuminate and flash alerting approaching motorists of a crosswalk or a dangerous area. NLK-LS marker will return to normal flashing mode 10 seconds after the vehicle has passed over the marker(s).
NLK Markers are completely independent and do not require wires or any program to function. Ready to operate “Out of the box”
NLK Solar lights are a cost effective easy solution for flush mounted surface markings.

<table>
<thead>
<tr>
<th>Description</th>
<th>Type</th>
<th>Burn type</th>
<th>Part #</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLK-Flash</td>
<td>Single sided</td>
<td>Flashing</td>
<td>GSNLK-SS-Color</td>
</tr>
<tr>
<td>NLK-Flash</td>
<td>Double Sided</td>
<td>Flashing</td>
<td>GSNLK-DS-Color-Color</td>
</tr>
<tr>
<td>NLK-LS</td>
<td>Single sided</td>
<td>Flash with Light sensor</td>
<td>GSNLK-LS-SS-Color</td>
</tr>
<tr>
<td>NLK-LS</td>
<td>Double sided</td>
<td>Flash with Light sensor</td>
<td>GSNLK-LS-DS-Color-Color</td>
</tr>
<tr>
<td>Colors</td>
<td></td>
<td>White, amber, red green, blue</td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td>Electric</td>
<td>Double layer capacitor</td>
<td></td>
</tr>
<tr>
<td>Life Span</td>
<td>7 to 10 Years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For more information please contact your sales representative or US Reflector
Toll Free: 800 414-5024 / www.usreflector.com
GEOVISION Flush-mounted LED guidance systems

Snow plowable markers are completely flush to the road surface. Powered by hard wire, the GEOVISION marker system is a solid investment for long term L.E.D. Road markings.

GEOVISION snowplowable markers can be activated by electronic vehicle radar, movement sensors and Step-Right pedestrian activated switch pads.

**CHARACTERISTICS**
- Flush-mounted optical guidance system delineates roadway lines
- LED modules protrude no more than 3 mm above the road surface
- Stainless steel ring protects the optics against steel snow plow blades
- LED modules for one or two-way operation
- Available in two colors per side for access control such as Red/ Green
- A variety of functions (Sequential/chaser lights, brightness, flashing)
- Trigger options include Radar, movement detector & tactile trigger pads
- Excellent add-on to pedestrian crosswalk sign flashing systems
- Compact, maintenance free and easy to install

**Solar Radar digital Radar detector**
Designed to detect the speed of vehicles and trigger the GEOVISION LED marker system at a given adjustable speed limit Uni or bi-directional

**Movement Sensor**
The movement sensors detect pedestrians who are about to cross the road. Low electric power consumption allows the movement detectors and LED markers to be powered with solar.

**Step-Right pedestrian activated switch pads**
Designed to be placed onto the surface of pedestrian ramps as a supplementary call button as well as being able to cancel a pedestrian call if vacated. Each button or rows of buttons on the switch pad can be individually activated so that both presence and general direction can be determined

**Manual push button**
Pole mounted crosswalk activation button allows pedestrians to trigger crosswalk LED’s

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<table>
<thead>
<tr>
<th>Description</th>
<th>Part #</th>
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<tbody>
<tr>
<td>Radar Detector</td>
<td>8355</td>
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<tr>
<td>Movement Sensor</td>
<td>8350</td>
</tr>
<tr>
<td>Step Right Tactile pad</td>
<td>PSP2000</td>
</tr>
<tr>
<td>Manual Push button</td>
<td>GS-PB-1</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Part #</th>
<th>Single sided</th>
<th>Double sided</th>
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</thead>
<tbody>
<tr>
<td>Part 2I-GSXL-8511</td>
<td>One way 6 LED’s</td>
<td>Two way 6 LED’s x 2</td>
</tr>
<tr>
<td>White 1.0 VA (40 mA)</td>
<td>White 2.0 VA (80 mA)</td>
<td></td>
</tr>
<tr>
<td>Red, Yellow 0.5 VA (20 mA)</td>
<td>Red / white, yellow 1.5 VA (60 mA)</td>
<td></td>
</tr>
</tbody>
</table>

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Toll Free: 800 414-5024 / www.usreflector.com