

MODEL 2424-HI-8-DC20 SPECIFICATIONS**Generic Sign Alert (Meets MUTCD & ITE Standards)****Solar Panel**

- Maximum Power (P max) 20 W
- Voltage at Pmax (V mp) 17.3 V
- Current at Pmax (IMP) 1.16 A
- Short-Circuit Current (Isc) 1.29 A
- Open-Circuit Voltage (Voc) 21.6 V

Solid State Regulator (built-in flasher & dimmer)

K&K Systems SPLasher is a compact all-in-one solar controller with maximum power point tracking, flasher, and auto-dimmer. Its compatible with all 24-7 solar stop beacons, hazard beacons, and has a dry contact for sensor activated beacons. The switch port allows you to hook up any activation switches such as the high water level sensor, motion sensor, push button sensor, moisture sensor, or radar sensor. With the adjustable mode, you can adjust the duty cycle from 90/10 to 50/50 and change the flashers to activate for 24-7, 30 minutes, 3 minutes, or 1 minute.

Signage

- Any 24" x 24" MUTCD sign
- High Intensity
- 8 LEDs
- .080 aluminum

Control Cabinet/Battery

- Cabinet is 7½" x 11¼" x 4", .063, aluminum, located below solar panel.
- Included battery shall be (1) 18 amp.

Optional

- Upgrade to Diamond Grade Sign
- Add Anti Graffiti Coating
- Radar

MODEL 3030-HI-8-DC20 SPECIFICATIONS

Generic Sign Alert (Meets MUTCD & ITE Standards)

Solar Panel

- Maximum Power (P max) 20 W
- Voltage at Pmax (V mp) 17.3 V
- Current at Pmax (IMP) 1.16 A
- Short-Circuit Current (Isc) 1.29 A
- Open-Circuit Voltage (Voc) 21.6 V

Solid State Regulator (built-in flasher & dimmer)

K&K Systems SPLasher is a compact all-in-one solar controller with maximum power point tracking, flasher, and auto-dimmer. Its compatible with all 24-7 solar stop beacons, hazard beacons, and has a dry contact for sensor activated beacons. The switch port allows you to hook up any activation switches such as the high water level sensor, motion sensor, push button sensor, moisture sensor, or radar sensor. With the adjustable mode, you can adjust the duty cycle from 90/10 to 50/50 and change the flashers to activate for 24-7, 30 minutes, 3 minutes, or 1 minute.

Signage

- Any 30" x 30" MUTCD sign
- High Intensity
- 8 LEDs
- .080 aluminum

Control Cabinet/Battery

- Cabinet is 7½" x 11¼" x 4", .063, aluminum, located below solar panel.
- Included battery shall be (1) 18 amp.

Optional

- Upgrade to Diamond Grade Sign
- Add Anti Graffiti Coating
- Radar

MODEL 3636-HI-8-DC20 SPECIFICATIONS**Generic Sign Alert (Meets MUTCD & ITE Standards)****Solar Panel**

- Maximum Power (P max) 20 W
- Voltage at Pmax (V mp) 17.3 V
- Current at Pmax (IMP) 1.16 A
- Short-Circuit Current (Isc) 1.29 A
- Open-Circuit Voltage (Voc) 21.6 V

Solid State Regulator (built-in flasher & dimmer)

K&K Systems SPLasher is a compact all-in-one solar controller with maximum power point tracking, flasher, and auto-dimmer. Its compatible with all 24-7 solar stop beacons, hazard beacons, and has a dry contact for sensor activated beacons. The switch port allows you to hook up any activation switches such as the high water level sensor, motion sensor, push button sensor, moisture sensor, or radar sensor. With the adjustable mode, you can adjust the duty cycle from 90/10 to 50/50 and change the flashers to activate for 24-7, 30 minutes, 3 minutes, or 1 minute.

Signage

- Any 36" x 36" MUTCD sign
- High Intensity
- 8 LEDs
- .080 aluminum

Control Cabinet/Battery

- Cabinet is 7½" x 11¼" x 4", .063, aluminum, located below solar panel.
- Included battery shall be (1) 18 amp.

Optional

- Upgrade to Diamond Grade Sign
- Add Anti Graffiti Coating
- Radar

MODEL 4848-HI-8-DC20 SPECIFICATIONS**Generic Sign Alert (Meets MUTCD & ITE Standards)****Solar Panel**

- Maximum Power (P max) 20 W
- Voltage at Pmax (V mp) 17.3 V
- Current at Pmax (IMP) 1.16 A
- Short-Circuit Current (Isc) 1.29 A
- Open-Circuit Voltage (Voc) 21.6 V

Solid State Regulator (built-in flasher & dimmer)

K&K Systems SPLasher is a compact all-in-one solar controller with maximum power point tracking, flasher, and auto-dimmer. Its compatible with all 24-7 solar stop beacons, hazard beacons, and has a dry contact for sensor activated beacons. The switch port allows you to hook up any activation switches such as the high water level sensor, motion sensor, push button sensor, moisture sensor, or radar sensor. With the adjustable mode, you can adjust the duty cycle from 90/10 to 50/50 and change the flashers to activate for 24-7, 30 minutes, 3 minutes, or 1 minute.

Signage

- Any 48" x 48" MUTCD sign
- High Intensity
- 8 LEDs
- .080 aluminum

Control Cabinet/Battery

- Cabinet is 7½" x 11¼" x 4", .063, aluminum, located below solar panel.
- Included battery shall be (1) 18 amp.

Optional

- Upgrade to Diamond Grade Sign
- Add Anti Graffiti Coating
- Radar



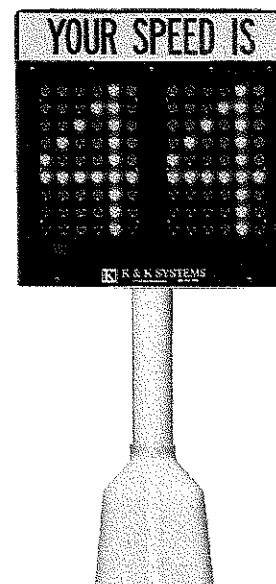
Tel: 888-414-3003
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Fax: 662-566-7123
Email: Sales@k-ksystems.com

Radar Speed Monitors Pole Mounted

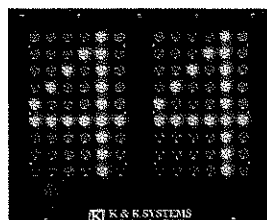
MODEL RPM14

FEATURES

- 14" LED Display
- Easily Adapt to Existing Pole or One of Our Optional Poles
- Radar is FCC pre-approved with CE mark for worldwide deployment
- Lowest power industry standard radar for speed measurement
- All LED Display
- Available in 24.125GHz and 24.200Ghz
- All Aluminum Display Enclosure
- Powder Coat Paint
- Front Serviceable
- Over Speed Flashing Violator Alert
- Over Speed Blanking Violator Alert
- KPH Option available



PROTECTIVE FRONT DISPLAY PLATE



- Aluminum with Lexan Reinforcement
- Black Front to Reduce Glare

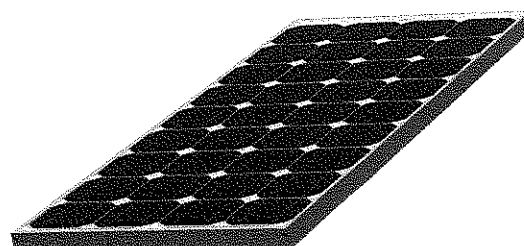
Quick Selection Switch

With K&K Systems' Quick Speed Display Selection Switch you are able to change your over speed violator alert speed and your blanking violator alert without need of a CPU. This will allow for field workers to have no experience in programming – just push the button to desired speed threshold.



Optional Solar Package

With K&K Systems optional Solar feature you no longer need to trench or bore electricity to your radar display. No more Power Bill!

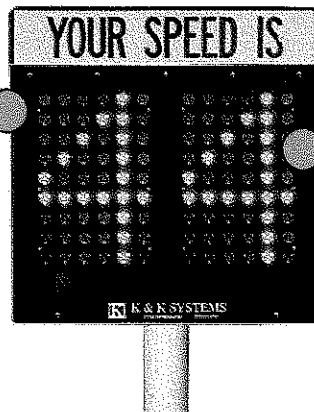


General Specifications for Model RPM14

The RPM14 along with all other radar displays is designed to keep both pedestrians and vehicular traffic safe by reminding the motorist of their speed and by using its violation alert flashing display to draw extra attention to radar display if the motorist is speeding. Radar displays have been proven to slow motorist down anywhere from at least 5-10 MPH.

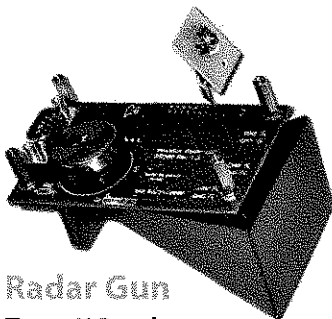
Display Cabinet

Height: 23.5"
Length: 26"
Depth: 6"
Paint: Powder coat
Paint color: White with black face
Serviceable: Front
Material: Aluminum
Access: Hinged
Protection: Aluminum face & Lexan reinforcement.



Display Modules

Height: 13.92"
Length: 9.18"
of modules: 2
Matrix size: 12x9
LED's per pixel: 3
Color: Amber
Addressable: Dipswitches
Viewing angle: 30 Degrees
LED module paint: Flat black



Radar Gun

Type: K Band
Frequency: 24.125 GHZ
Power output: 5mw
Antenna gain: 21db
Protection: Reverse battery
Detection range: 500'
Operating temp: -22F-185°F
Accuracy: +/- 0.1 MPH
Speed range: 5-105 MPH



Regulator

Voltage: 12VDC
Rated solar input: 10A
Rated load current: 10A
Equalization voltage: 14.8
Low voltage disconnect: 11.1v
Low voltage reconnect: 13.1
Operating temp: -35-55°C



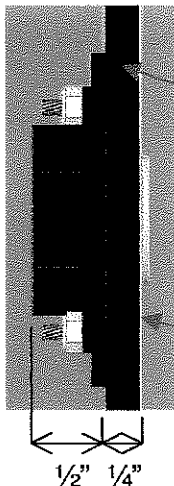
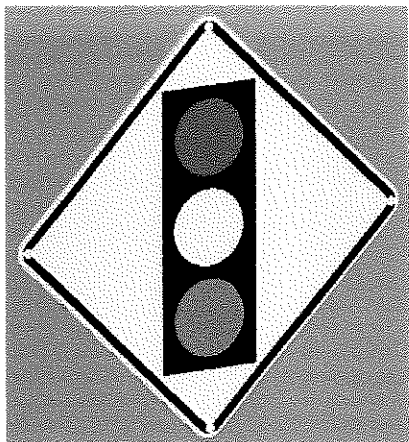
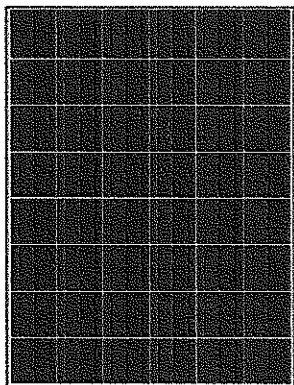
Violation Alerts

Threshold 1: Flashing display
Threshold 2: Blanking display
Settable: Push button selection switches

Options

- Solar powered
- AC powered
- DC powered
- Round aluminum pole kit 11'-20'
- Batteries AGM or wet cell
- Traffic stats
- Speed limit sign
- White or red violator alert strobe
- Portable dolly
- KPH
- Slow down
- Third digit

Sign Insert - DC



Solar

- **Laminate:** Glass /EVA / TPT (tedlar/pet/tedlar) or TPE
- **Front Side:** High-transmission 3.2mm tempered glass
- **Back Side:** TPT /TPE
- **Frame:** Clear anodized aluminum frame
- **Output:** Junction box
- **Watts:** 10W – 40W

LEDs

- **Type:** Round
- **Size:** 20mm
- **DC Voltage (V):** 12
- **DC Voltage (A):** .30
- **Lumen, RED, AMBER or WHITE**

SPLasher

- Built-in solar controller/battery charger/2 channel flasher 50/50
- Advanced solar charger with Maximum Power-Point Tracking (MPPT)
- Multi-stage battery charger to maximize battery life
- Wide solar panel input voltage – up to 32VDC
- LED flasher outputs (x2)
- Intelligent auto-dimming for maximum battery run-time
- Operating temperature: -40°C to +85°C

Battery

- **SLA Type:** AGM
- **Voltage:** 12VDC
- **20 A.H. Rate:** 7.5A, 10.0A or 18.0A

Composite

- Aluminum on both sides coated with polyester paint (.30mm each)
- High Density Polyethylene (HDPE) core (5.4mm)
- Heavier aluminum to prevent surface dings and resists scratching and denting better than any other substrate

MUTCD Signs

- .080 Aluminum sheet, Diamond Grade #3
- Reflective surface 3M sheeting
- Anti-graffiti overlay protection
- Anti-vandal fasteners

Sign Alert™

Warning Signs

Solar Powered

With solar technology, this system can virtually be placed anywhere off the grid. With the "off the shelf" battery and smart controller housed behind the solar panel, installation is a snap.

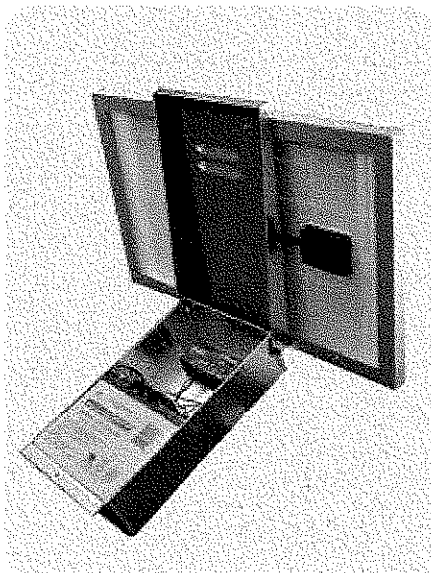
Reflective Sign

High intensity signage and MUTCD compliant. Can be upgraded to Diamond Grade.

Ultra-Bright LEDs

Our ultra bright LEDs are one of the brightest in the industry and are completely weather proof. The LEDs will adjust brightness according to available light in order to conserve energy and battery life and maximize brightness.

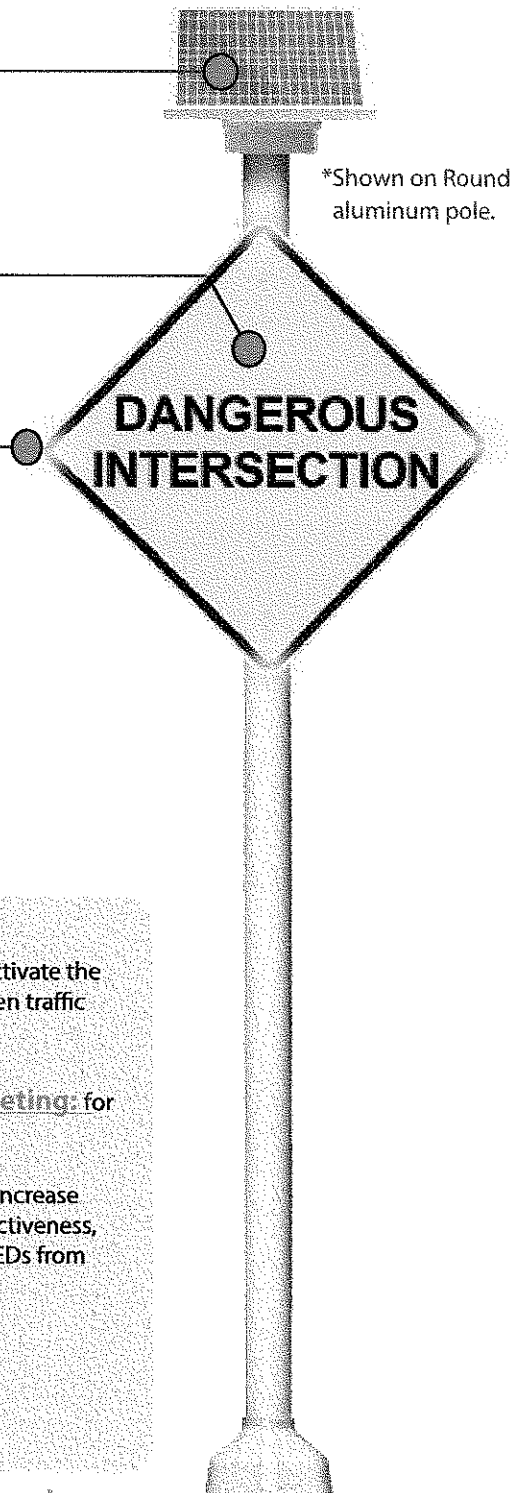
- All controls hidden behind solar panel
- Off the shelf battery
- Smart controller
- Maximum power point tracking
- Light weight design
- Multi-stage battery charger



Radar Detector: to activate the Sign Alert's LEDs only when traffic is approaching the sign.

Diamond Grade Sheeting: for optimal reflectivity.

Additional LEDs: to increase sign's brightness and effectiveness, increase the number of LEDs from four to eight.



*Shown on Round aluminum pole.



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Sign Alert™

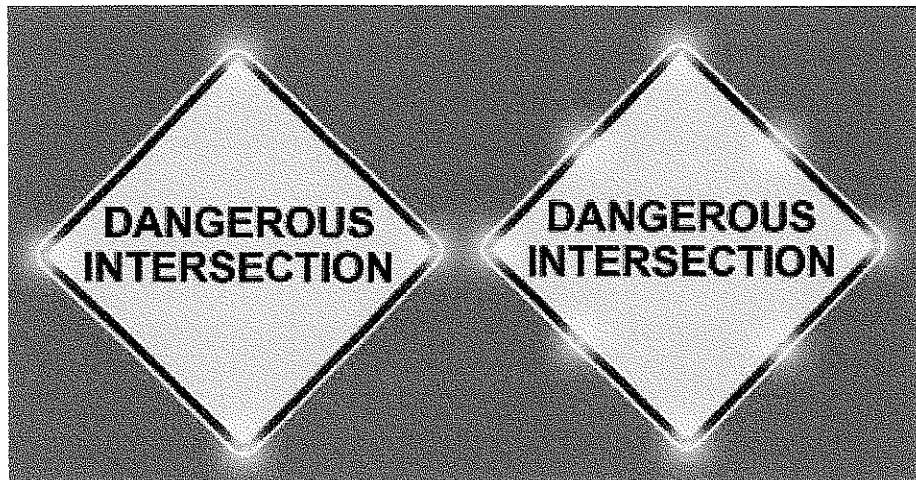
Warning Signs

K&K Systems' Sign Alert™ Warning Signs are designed to warn drivers of dangerous curves, intersections, or crossings and to caution drivers when approaching these areas. Ultra-bright LEDs bring the sign to life at night when drivers might not otherwise know they are approaching dangerous roadways. Whether in congested cities, or on rural and remote roadways, K&K Systems' Sign Alert Warning Signs are visible in all weather conditions.

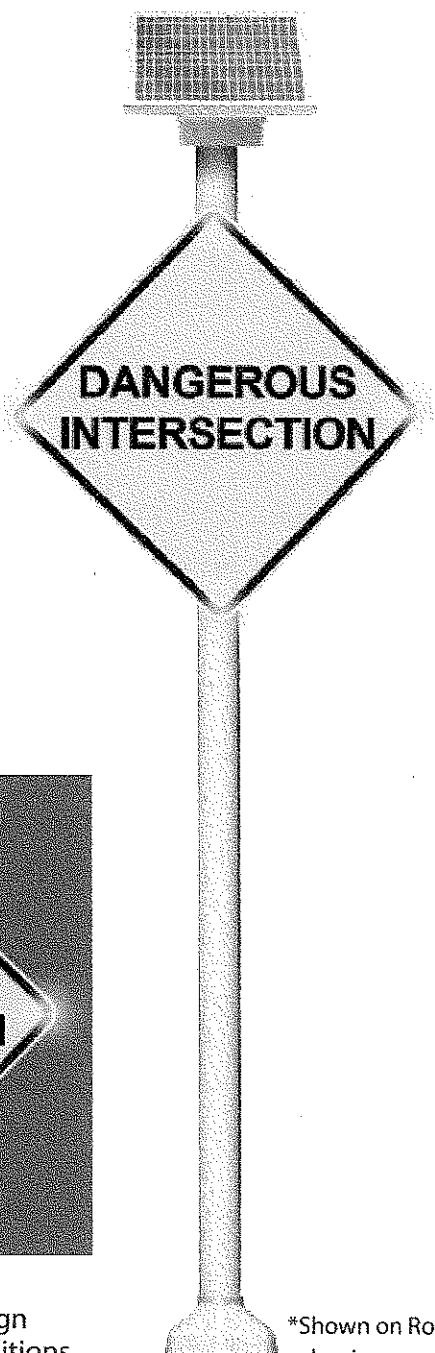
Warning Sign Alert Systems operate 24 hours a day - 7 days a week with our auto dimming and multi-stage battery charger features built into our smart controller. Our Sign Alert Systems have multiple options available to enhance their performance and to increase safety.

FEATURES

- Simple installation
- Compact battery box
- Solar powered
- Ultra slim design
- Visible day and night
- Automatic light output for maximum efficiency
- Super bright LEDs



Upgrade K&K Sign Alert Warning Sign from four ultra bright LEDs to eight ultra-bright LEDs for an even more illuminating sign that is sure to give drivers advance warning of dangerous road conditions.



*Shown on Round
at night



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Sign Alert™

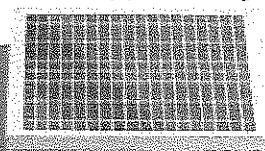
Stop Sign

K&K Systems' Sign Alert™ Stop Signs are designed for intersections that need enhanced visibility. Whether in congested cities, or on rural and remote roadways, K&K Systems' Sign Alert Stop Signs are used to enhance the visibility at intersections that are considered dangerous due to obstructed view, inclement weather, and right-of-way confusion. Sign Alert Systems are visible in all weather conditions with our ultra-bright LEDs.

Sign Alert Stop Signs operate 24 hours / 7 days a week at top performance with our auto dimming and multi-stage battery charger features built into our smart controller. Our Sign Alert Systems have the capability to also be activated by our optional radar detector to flash only when vehicular traffic is approaching.

FEATURES

- Simple installation
- Solar powered
- Visible day and night
- Automatic light output for maximum efficiency
- Compact battery box
- Ultra slim design
- Super bright LEDs



Sign Alert™

Stop Sign

Solar Powered

With solar technology, this system can virtually be placed anywhere off the grid. With the "off the shelf" battery and smart controller housed behind the solar panel, installation is a snap.

Reflective Sign

High intensity signage and MUTCD compliant. Can be upgraded to Diamond Grade.

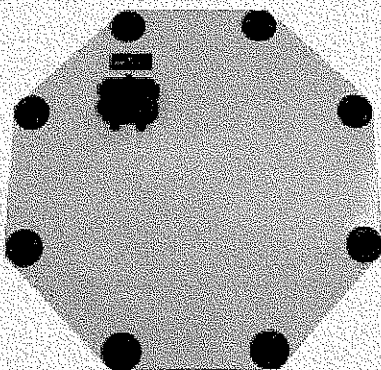
Ultra-Bright LEDs

Sign Alert's ultra bright LEDs are one of the brightest in the industry and are completely weather proof. The LEDs will adjust brightness according to available light in order to conserve energy and battery life and maximize brightness. Adjust the flash rate from 50/50 to 90/10 duty cycle.

With SPLasher technology, LED Sign Inserts can be activated using optional motion technology to only activate when cars are approaching and can be set to go off after your desired preset threshold.

- All controls hidden behind solar panel
- Off the shelf battery
- Smart controller
- Light weight design
- Multi-stage battery charger
- Maximum power point tracking
- Adjustable duty cycle

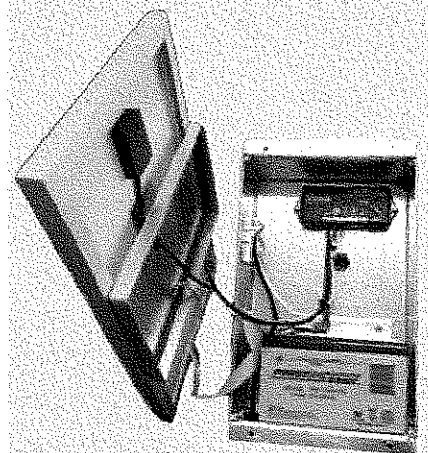
Back View



The back of the sign is a smooth sheet of steel, routed out on the inside to completely enclose and protect all wires.

*Shown on Round aluminum pole.

Compact Battery Cabinet



Compact Battery Cabinet houses the SPLasher and the off-the-shelf battery under the solar panel.



CONTRACT

State of Oklahoma

Dispatch via Print

Supplier 0000056000
K & K SYSTEMS INC
699 PALMETTO RD
TUPELO MS 38801-7662
USA

Contract ID 0000000000000000000000003962			Page 3 of 3	
Contract Dates 01/15/2015 to 01/14/2017	Currency USD	Rate Type CRRNT	Rate Date PO Date	
Description: SW685 - LED FLASHING SIGNS		Contract Maximum 0.00		
TYPE: STATEWIDE				

Tax Exempt? Y Tax Exempt ID:736017987

Contract Lines:

Line #	Cat CD / Item ID / Item Desc	UOM	Minimum Order Qty	Amt	Maximum / Open Qty	Amt
	Contract Base Pricing		1,275.00000	EA		0001

COMMENTS:

Final = The price is final after adjustments
 Hard = Apply adjustments regardless of other adjustments
 Skip = Skip adjustments if any other adjustments have been applied

Authorized Signature