MODEL ECO-115-S8 SPECIFICATIONS
Single 8" Red LED Stop Beacon 24/7 (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

SPLasher

Electrical Specifications:

• Voltage:	12V
• Rated Solar Input:	10A
• Rated Load Current:	10A
• Low Voltage Disconnect:	9.0V
• Trickle Charge from	9.0V – 13.5V
• Maximum Charge	14.4V
• Operating Temp.	-40° to +85oC

Solid State Flasher (built-in)

- Input voltage of 12 VDC
- Flash rate available 12 (10%/90% cycle) or 60 (50%/50% cycle) F.P.M.
- Capable of switching 2 amps @ 12 VDC

Auto Dimming (built-in)

- Feature to reduce power usage during overcast conditions and nighttime usage.

Traffic Hazard Beacons

Polycarbonate Housing:

- 8" light housing plastic injected molded polystyrene tufen u.v. impregnated material for ultraviolet rays

LED:

• Color	Red
• Applied Voltage	12VDC
• Power Consumption (watts)	5
• Dominant Wavelength (nm)	626
• On Axis Luminous Intensity (Min)	450 cd
• LEDs per signal lamp	121
• Intensity loss due to single LED failure	.83%
• Operation Temperature	-40°F to +165°F

Control Cabinet/Battery

- Cabinet is 14" x 7" x 3", .063, aluminum, located below the solar panel.
- Included battery shall be (1) 18 amp.

MODEL ECO-115-S12 SPECIFICATIONS

Single 12" Red LED Stop Beacon 24/7 (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.

Traffic Stop Beacon

Polycarbonate Housing:

- 12" light housing plastic injected molded polystyrene tufen u.v. impregnated material for ultra violet rays

LED:

• Color	Red
• Applied Voltage	12VDC
• Power Consumption (watts)	5
• Dominant Wavelength (nm)	626
• On Axis Luminous Intensity (Min)	450 cd
• LEDs per signal lamp	121
• Intensity loss due to single LED failure	.83%
• Operation Temperature	-40°F to +165°F

Control Cabinet/Battery

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

MODEL ECO-117-D8 SPECIFICATIONS
Double 8" Red LED Stop Beacon 24/7 (Meets MUTCD & ITE Standards)

Solar Panel

• Maximum Power (P max)	40 W
• Voltage at Pmax (V mp)	17.3 V
• Current at Pmax (IMP)	2.31 A
• Short-Circuit Current (Isc)	2.57 A
• Open-Circuit Voltage (Voc)	21.6 V

SPLasher

Electrical Specifications:

• Voltage:	12V
• Rated Solar Input:	10A
• Rated Load Current:	10A
• Low Voltage Disconnect:	9.0V
• Trickle Charge from	9.0V – 13.5V
• Maximum Charge	14.4V
• Operating Temp.	-40° to +85oC

Solid State Flasher (built-in)

- Input voltage of 12 VDC
- Flash rate available 12 (10%/90% cycle) or 60 (50%/50% cycle) F.P.M.
- Capable of switching 2 amps @ 12 VDC

Auto Dimming (built-in)

- Feature to reduce power usage during overcast conditions and nighttime usage.

Traffic Hazard Beacons

Polycarbonate Housing:

- 8" light housing plastic injected molded polystyrene tufen u.v. impregnated material for ultraviolet rays

LED:

• Color	Red
• Applied Voltage	12VDC
• Power Consumption (watts)	5
• Dominant Wavelength (nm)	626
• On Axis Luminous Intensity (Min)	450 cd
• LEDs per signal lamp	121
• Intensity loss due to single LED failure	.83%
• Operation Temperature	-40°F to +165°F

Control Cabinet/Battery

- Cabinet is 14" x 14" x 3", .063, aluminum, located below the solar panel.
- Included battery shall be (2) 18 amp.

MODEL ECO-117-D12 SPECIFICATIONS

Double 12" Red LED Stop Beacon 24/7 (Meets MUTCD & ITE Standards)

Solar Panel

• Maximum Power (P max)	40 W
• Voltage at Pmax (V mp)	17.3 V
• Current at Pmax (IMP)	2.31 A
• Short-Circuit Current (Isc)	2.57 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.

Traffic Stop Beacons

Polycarbonate Housing:

- 12" light housing plastic injected molded polystyrene tufen u.v. impregnated material for ultra violet rays

LEDs:

• Color	Red
• Applied Voltage	12VDC
• Power Consumption (watts)	5
• Dominant Wavelength (nm)	626
• On Axis Luminous Intensity (Min)	450 cd
• LEDs per signal lamp	121
• Intensity loss due to single LED failure	.83%
• Operation Temperature	-40°F to +165°F

Control Cabinet/Battery

- Cabinet is 17½" x 11¼" x 4", .063, aluminum, located below solar panel.
- Included batteries shall be (2) 18 amp.

MODEL ECO-116-S8 SPECIFICATIONS
Single 8" Yellow/Amber LED Stop Beacon 24/7 (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

SPLasher

Electrical Specifications:

• Voltage:	12V
• Rated Solar Input:	10A
• Rated Load Current:	10A
• Low Voltage Disconnect:	9.0V
• Trickle Charge from	9.0V – 13.5V
• Maximum Charge	14.4V
• Operating Temp.	-40° to +85oC

Solid State Flasher (built-in)

- Input voltage of 12 VDC
- Flash rate available 12 (10%/90% cycle) or 60 (50%/50% cycle) F.P.M.
- Capable of switching 2 amps @ 12 VDC

Auto Dimming (built-in)

- Feature to reduce power usage during overcast conditions and nighttime usage.

Traffic Hazard Beacons

Polycarbonate Housing:

- 8" light housing plastic injected molded polystyrene tufen u.v. impregnated material for ultraviolet rays

LED:

• Color	Yellow/Amber
• Applied Voltage	12VDC
• Power Consumption (watts)	5
• Dominant Wavelength (nm)	626
• On Axis Luminous Intensity (Min)	450 cd
• LEDs per signal lamp	121
• Intensity loss due to single LED failure	.83%
• Operation Temperature	-40°F to +165°F

Control Cabinet/Battery

- Cabinet is 14" x 7" x 3", .063, aluminum, located below the solar panel.
- Included battery shall be (1) 18 amp.

MODEL ECO-116-S12 SPECIFICATIONS

Single 12" Yellow/Amber LED Hazard Beacon 24/7 (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.

Traffic Stop Beacon

Polycarbonate Housing:

- 12" light housing plastic injected molded polystyrene tufen u.v. impregnated material for ultra violet rays

LED:

• Color	Yellow/Amber
• Applied Voltage	12VDC
• Power Consumption (watts)	5
• Dominant Wavelength (nm)	592
• On Axis Luminous Intensity (Min)	350 cd
• LEDs per signal lamp	121
• Intensity loss due to single LED failure	.83%
• Operation Temperature	-40°F to +165°F

Control Cabinet/Battery

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

MODEL ECO-118-D8 SPECIFICATIONS
Double 8" Yellow/Amber LED Stop Beacon 24/7 (Meets MUTCD & ITE Standards)

Solar Panel

• Maximum Power (P max)	40 W
• Voltage at Pmax (V mp)	17.3 V
• Current at Pmax (IMP)	2.31 A
• Short-Circuit Current (Isc)	2.57 A
• Open-Circuit Voltage (Voc)	21.6 V

SPLasher

Electrical Specifications:

• Voltage:	12V
• Rated Solar Input:	10A
• Rated Load Current:	10A
• Low Voltage Disconnect:	9.0V
• Trickle Charge from	9.0V – 13.5V
• Maximum Charge	14.4V
• Operating Temp.	-40° to +85oC

Solid State Flasher (built-in)

- Input voltage of 12 VDC
- Flash rate available 12 (10%/90% cycle) or 60 (50%/50% cycle) F.P.M.
- Capable of switching 2 amps @ 12 VDC

Auto Dimming (built-in)

- Feature to reduce power usage during overcast conditions and nighttime usage.

Traffic Hazard Beacons

Polycarbonate Housing:

- 8" light housing plastic injected molded polystyrene tufen u.v. impregnated material for ultraviolet rays

LED:

• Color	Yellow/Amber
• Applied Voltage	12VDC
• Power Consumption (watts)	5
• Dominant Wavelength (nm)	626
• On Axis Luminous Intensity (Min)	450 cd
• LEDs per signal lamp	121
• Intensity loss due to single LED failure	.83%
• Operation Temperature	-40°F to +165°F

Control Cabinet/Battery

- Cabinet is 14" x 14" x 3", .063, aluminum, located below the solar panel.
- Included battery shall be (2) 18 amp.

MODEL ECO-118-D12 SPECIFICATIONS

Double 12" Yellow/Amber LED Hazard Beacon 24/7 (Meets MUTCD & ITE Standards)

Solar Panel

• Maximum Power (P max)	40 W
• Voltage at Pmax (V mp)	17.3 V
• Current at Pmax (IMP)	2.31 A
• Short-Circuit Current (Isc)	2.57 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.

Traffic Stop Beacons

Polycarbonate Housing:

- 12" light housing plastic injected molded polystyrene tufen u.v. impregnated material for ultra violet rays

LEDs:

• Color	Yellow/Amber
• Applied Voltage	12VDC
• Power Consumption (watts)	5
• Dominant Wavelength (nm)	592
• On Axis Luminous Intensity (Min)	350 cd
• LEDs per signal lamp	121
• Intensity loss due to single LED failure	.83%
• Operation Temperature	-40°F to +165°F

Control Cabinet/Battery

- Cabinet is 17½" x 11¼" x 4", .063, aluminum, located below solar panel.
- Included batteries shall be (2) 18 amp.

MODEL ECO-112-S8 SPECIFICATIONS

Single 8" Yellow/Amber LED School Zone Beacon (Meets MUTCD & ITE Standards)

Solar Panel

- Maximum Power (P max) 10 W
- Voltage at Pmax (V mp) 17.3 V
- Current at Pmax (IMP) 0.58 A
- Short-Circuit Current (Isc) 0.64 A
- Open-Circuit Voltage (Voc) 21.6 V

SPLasher

Electrical Specifications:

- Voltage: 12V
- Rated Solar Input: 10A
- Rated Load Current: 10A
- Low Voltage Disconnect: 9.0V
- Trickle Charge from 9.0V – 13.5V
- Maximum Charge 14.4V
- Operating Temp. -40° to +85oC

Solid State Flasher (built-in)

- Input voltage of 12 VDC
- Flash rate available 12 (10%/90% cycle) or 60 (50%/50% cycle) F.P.M.
- Capable of switching 2 amps @ 12 VDC

Auto Dimming (built-in)

- Feature to reduce power usage during overcast conditions and nighttime usage.

Traffic Hazard Beacons

Polycarbonate Housing:

- 8" light housing plastic injected molded polystyrene tufen u.v. impregnated material for ultraviolet rays

LED:

- Color Yellow/Amber
- Applied Voltage 12VDC
- Power Consumption (watts) 5
- Dominant Wavelength (nm) 592
- On Axis Luminous Intensity (Min) 350 cd
- LEDs per signal lamp 121
- Intensity loss due to single LED failure 1.2%
- Operation Temperature -40°F to +165°F

7 Day Programmable Timer Included

Control Cabinet/Battery

- Cabinet is 14" x 7" x 3", .063 aluminum, located below the solar panel.
- Included battery shall be (1) 18 amp.
- Drop down box for easy access to 7 day timer

MODEL ECO-112-S12 SPECIFICATIONS

Single 12" Yellow/Amber LED School Zone Beacon (Meets MUTCD & ITE Standards)

Solar Panel

• Maximum Power (P max)	10 W
• Voltage at Pmax (V mp)	17.3 V
• Current at Pmax (IMP)	0.58 A
• Short-Circuit Current (Isc)	0.64 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.

Traffic Stop Beacon

Polycarbonate Housing:

- 12" light housing plastic injected molded polystyrene tufen u.v. impregnated material for ultra violet rays

LED:

• Color	Yellow/Amber
• Applied Voltage	12VDC
• Power Consumption (watts)	5
• Dominant Wavelength (nm)	592
• On Axis Luminous Intensity (Min)	350 cd
• LEDs per signal lamp	121
• Intensity loss due to single LED failure	.83%
• Operation Temperature	-40°F to +165°F

7 Day Programmable Timer Included

Control Cabinet/Battery

- Cabinet is 7½" x 11¼" x 4", .063, aluminum, located below solar panel.
- Included battery shall be (1) 18 amp.
- Drop down box for easy access to 7 day timer

MODEL ECO-112-D8 SPECIFICATIONS

Double 8" Yellow/Amber LED School Zone Beacon (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

SPLasher

Electrical Specifications:

• Voltage:	12V
• Rated Solar Input:	10A
• Rated Load Current:	10A
• Low Voltage Disconnect:	9.0V
• Trickle Charge from	9.0V – 13.5V
• Maximum Charge	14.4V
• Operating Temp.	-40° to +85oC

Solid State Flasher (built-in)

- Input voltage of 12 VDC
- Flash rate available 12 (10%/90% cycle) or 60 (50%/50% cycle) F.P.M.
- Capable of switching 2 amps @ 12 VDC

Auto Dimming (built-in)

- Feature to reduce power usage during overcast conditions and nighttime usage.

Traffic Hazard Beacons

Polycarbonate Housing:

- 8" light housing plastic injected molded polystyrene tufen u.v. impregnated material for ultraviolet rays

LED:

• Color	Yellow/Amber
• Applied Voltage	12VDC
• Power Consumption (watts)	5
• Dominant Wavelength (nm)	592
• On Axis Luminous Intensity (Min)	350 cd
• LEDs per signal lamp	121
• Intensity loss due to single LED failure	1.2%
• Operation Temperature	-40°F to +165°F

7 Day Programmable Timer Included

Control Cabinet/Battery

- Cabinet is 14" x 14" x 3", .063 aluminum, located below the solar panel.
- Included battery shall be (1) 18 amp.
- Drop down box for easy access to 7 day timer

MODEL ECO-112-D12 SPECIFICATIONS

Double 12" Yellow/Amber LED School Zone Beacon (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.

Traffic Stop Beacons

Polycarbonate Housing:

- 12" light housing plastic injected molded polystyrene tufen u.v. impregnated material for ultra violet rays

LEDs:

• Color	Yellow/Amber
• Applied Voltage	12VDC
• Power Consumption (watts)	5
• Dominant Wavelength (nm)	592
• On Axis Luminous Intensity (Min)	350 cd
• LEDs per signal lamp	121
• Intensity loss due to single LED failure	.83%
• Operation Temperature	-40°F to +165°F

7 Day Programmable Timer Included

Control Cabinet/Battery

- Cabinet is 7½" x 11¼" x 4", .063, aluminum, located below solar panel.
- Included battery shall be (1) 18 amp.
- Drop down box for easy access to 7 day timer

MODEL MDOT-S247 SPECIFICATIONS

Solar 24/7 flasher assembly with cabinet; SL Series 16" x 15" x 9" cabinet, splasher charge controller and flasher, mounting hardware for box, and wiring harness. NO BATTERY INCLUDED
(Meets MUTCD & ITE Standards)

Control Cabinet/Battery

- Cabinet is 16" x 15" x 9", .080, aluminum, "lockable", to be located per state specifications.
- Mounting hardware for box (U-bolt) Two (2) required.
- Recommended battery shall be 100 amp deep cycle marine. **(Options Available)**

SPLasher

Electrical Specifications:

• Voltage:	12V
• Rated Solar Input:	10A
• Rated Load Current:	10A
• Low Voltage Disconnect:	9.0V
• Trickle Charge from	9.0V – 13.5V
• Maximum Charge	14.4V
• Operating Temp.	-40° to +85oC

Solid State Flasher (built-in)

- Input voltage of 12 VDC
- Flash rate available 12 (10%/90% cycle) or 60 (50%/50% cycle) F.P.M.
- Capable of switching 2 amps @ 12 VDC

Auto Dimming (built-in)

- Feature to reduce power usage during overcast conditions and nighttime usage.

MODEL MDOT-SSZ SPECIFICATIONS

Solar School Zone flasher assembly with cabinet; SL Series 24" x 15" x 9" cabinet, DC - 365-day programmable timer module, Solar charge controller, Flasher, mounting hardware for box, and wiring harness. NO BATTERY INCLUDED

(Meets MUTCD & ITE Standards)

Control Cabinet/Battery

- Cabinet is 24" x 15" x 9", .080, aluminum, "lockable", to be located per state specifications.
- Mounting hardware for box (U-bolt)
- Recommended battery shall be 100 amp deep cycle marine. **(Options Available)**

Programmable Timer Module

- 500 Program Steps – Steps may be assigned to any program for a total of 500 steps.
- 32 Programs – Main program plus 31 alternate programs that are called by the exception periods.
- 63 Exception Periods – Periods that call alternate programs.
- Programmable Momentary Outputs – Timed outputs from 1-250 seconds.
- 1, 2 or 4 Relay Options – 16A 30VDC/250VAC
- Nonvolatile Memory – Retains program data with loss of power.
- Clock Capacitor Backup – Powers clock during power loss.
- DC and Backup Power Clock Accuracy - +/- 0.002% at 78F
- Synchronous Timing on AC Power
- Automatic Leap Year Compensation
- Automatic Daylight Savings Time Compensation – User programmable.
- Unit to Unit Data/Time/Date or Time/Date Transfer
- 2 Line x 16 Character Backlit Liquid Crystal with Automatic Contrast Adjustment
- Audible Beeper for Status Indication During Programming
- 120VAC or 12VDC Operating Power

Solid State Regulator

Electrical Specifications:

- Voltage: 12V
- Rated Solar Input: 10A
- Rated Load Current: 10A
- Equalization Voltage: 14.8V
- Boost Battery: 14.4V
- Float Battery: 13.6V
- Low Voltage Disconnect: 11.1V
- Low Voltage Reconnect: 13.1V
- Self-Consumption: 6 mA
- Operating Temp. -35 to +55°C

Solid State Flasher

- Input voltage of 12 VDC
- Flash rate 60 F.P.M.

- Input voltage of 12 VDC (2 terminals)
- Two outputs of 12 VDC (4 terminals)
- Capable of switching 5 amps @ 12 VDC
- Input and output terminals 1/4 male quick connect
- Epoxy encapsulated construction
- Flasher is 3" x 1½", two outer mounting holes

MODEL MDOT-SPA SPECIFICATIONS

Solar Power Assembly; Solar Panel - 80W (47.2L x 20.7W x 1.77D), mounting bracket for solar, 100 amp battery, and wiring harness. (Meets MUTCD & ITE Standards)

Solar Panel

- Maximum Power (P max) 80 W
- Voltage at Pmax (V mp) 17.3 V
- Current at Pmax (IMP) 4.62 A
- Short-Circuit Current (Isc) 5.14 A
- Open-Circuit Voltage (Voc) 21.6 V

Side pole mounting bracket for DS-A1-80 (80W) Solar Panel. Includes all hardware.

Material

- Solar Angle Brackets: .125 3003-H14 aluminum
- Solar Mount Bracket: .125 3003-H14 aluminum
- All clamps, nuts, bolts & washers

Item #	SLA Type	Voltage	20 A.H. Rate	Physical Characteristics Standard and Metric Measurements*							
				Inches			Millimeters			Weight	
				L	W	H*	L	W	H*	lbs.	kgs.
BAT-12-100A	AGM	12	100.0	12.16	6.75	9.78	306	172	251	70.50	32.00