Illuminated Street Signs & Custom Enclosures

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Southern Manufacturing Circa 1939



To meet increased demand, Southern Manufacturing moved into a 240,000 square foot facility in March of 2014. Concurrent with the move, is the purchase and installation of new advanced equipment. While the plant and equipment are new, our commitment to providing top quality products and innovative solutions remains unchanged.

The move to the new plant in Sanford, Florida is the latest chapter in the growth of Southern Manufacturing from its roots in 1939 in an aircraft hangar at the old Orlando airport on Herndon Avenue. Today the company is owned by Earnest Products. Since 1994, Earnest Products has provided the highest quality fabricated metal products and enclosures to a wide variety of industries including aerospace, electronics, medical, specialized vehicles, and power distribution. The engineering skills and production capabilities of the two companies fit together well and complement each other.

To support the growth of the combined companies and to strive to exceed the expectations of our customers for quality, innovation, and shorter delivery schedules, the company invested millions of dollars in the new plant and equipment to go into it. The new production equipment includes a sophisticated combined shear and punch press, advanced bending equipment, automated material storage and retrieval, and a new powder coating line to augment the existing equipment. Moreover, there is ample space for additional machinery and equipment in the future.

Southern Manufacturing is focused on three principal markets: LED street name and blank out signs, enclosure solutions for intelligent transportation or ITS, and specialty enclosures. The specialty enclosures are used for UPS/BBS, lighting, SCADA, waste water management, and security. The catalog gives highlights of the products that we offer in these markets. Southern's staff of experienced design engineers and expanded manufacturing capabilities make us a valuable partner to add value to our customers.



Southern Manufacturing's New Home, April 2014

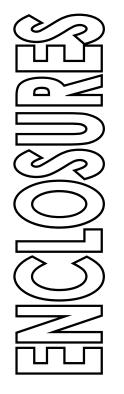
STREET SIGNS

CLEAN PROFILE LED, STANDARD "A" BODY & THINLINE LED

BLANK OUT, LANE CONTROL, REGULATORY & WARNING SIGNS

UTILITY, TRAFFIC, CALTRANS, BATTERY BACK UP ENCLOSURES

SPECIALTY ENCLOSURES & OTHER PRODUCTS





Southern Manufacturing is proud to be recognized as a leading manufacturer of illuminated street name, blank out and lane control signs in the United States. Southern is dedicated to improving technology and fabrication while, at the same time, keeping the highest standards of quality, reliability and low cost of operation for our customers.

Hospital Loop

Thin LED – Newark, NJ

W.H. Smith Blvd

Mulberry st

Main st

CLEAN PROFILE LED, STANDARD "A" BODY & THIN LED

















- UL listed and meet or exceed all state standards
- Can be installed in the field with no need to open the sign
- No tools are required to open the sign or replace the sign face
- Meets the visibility standard of the FWHA and complies with the 2009 edition of the MUTCD
- Housing is made from .125" powder coated aluminum
- LED signs feature a radiant high temperature fail-safe circuit to maximize life and are driven by an IP66 (or higher) class 2 power supply
- LEDs are bright white and rated for 60,000 hours
- All commonly used photocells can be built into the signs
- Easily accommodates all standard mounting hardware including tri-stud brackets
- Retroreflective sheeting available
- Excellent day and night visibility
- Lenses are impact resistant, 3mm thick UL approved white or clear polycarbonate

CLEAN PROFILE LED

- Energy efficient with very low wattage required for LED
- Designer style frames available to match individual streetscapes
- One of the most customizable signs on the market today
- Certified to withstand 150 mph winds
- Approved for use in several states with many others pending
- FDOT certified certificate number 69938912411071
- Independently tested to surpass 6 year thermal cycle test
- Entire surface is illuminated at greater than 400 lux
- Custom styled lenses available
- 7 year limited warranty

STANDARD "A" BODY

- Available with either LED, fluorescent or induction fluorescent lighting
- Energy efficient with very low wattage required for LED
- Standard "A" body is designed with the face angled at about 9 degrees
- Available in overall heights of 19" and 24" as single or double face signs
- Rated and tested to withstand 110 mph winds with driving rain
- FDOT certified LED certificate number 69938912411051, fluorescent certificate number 69938882411071
- Independently tested to surpass 6 year thermal cycle test
- 7 year limited warranty

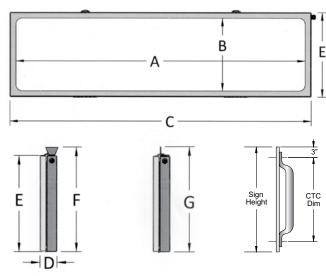
THIN LED

- Streamlined version of the standard LED street sign
- Energy efficient with very low wattage required for LED
- Available in overall height of 19" as single or double face signs
- Rated and tested to withstand 110 mph winds with driving rain
- FDOT certified LED certificate number 69938912411051
- Independently tested to surpass 6 year thermal cycle test
- 7 year limited warranty



CLEAN PROFILE LED

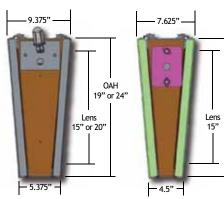
- A Standard viewable widths of 4', 5', 6', 7', 8', 9' or 10' custom widths available
- B Viewable height of 15" to 30" in 1" increments
- C Overall width of 3" greater than the viewable width
- D Sign depth: 3.5" single faced & 5.4" double faced
- E Overall sign height is 3" greater than viewable area
- F Overall height with mounting tab for tri-stud bracket of B+4.9"
- G Overall height with mating for EZ Bar mount of B+4.9"



Right Side View With Tristud Mount Option (TA)

- Right Side View With EZ-Bar Mount Option (TJ)
- STANDARD "A" BODY & THIN LED

STANDARD Designed for maximum illumination and easy maintenance. Available in single or double face, LED or fluorescent.



THIN LED All of the advantages of our standard LED, but a slimmer frame. Rigid or swinging mount. 19 inch only.

Right Side View

With Rear Mount

Option (RD)

OAH

19

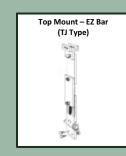
STANDARD A BODY, THIN LED & FLUORESCENT

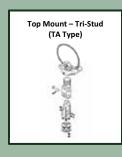
WEIGHT EXCLUDING BRACKETS - DOUBLE SIDED SIGNS											
4' x 19" 6' x 19" 8' x 19" 4' x 24" 6' x 24" 8' x 24"											
Clean Profile	39	54	69	44	61	78					
Standard	45	64	83	48	69	90					
Thin LED	41	60	79	N/A	N/A	N/A					
Fluorescent	55	74	94	58	79	101					

NOTE: Single Sided Signs weigh approximately 10% less

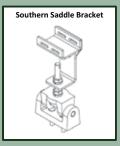
ENERGY CONSUMPTION IN WATTS											
4' SS 6' SS 8' SS 4' DS 6' DS 8' D											
Clean Profile Std. \leq 21" Tall	19	26	32	19	26	32					
Clean Profile Large ≥ 21 " Tall	32	46	59	32	46	59					
Standard & Thin LED	19	26	32	32	46	59					
Fluorescent	143	143	143	143	143	143					

CLEAN PROFILE Hanging Hardware









KEY FEATURES

- Easy to install and service
- 60,000 hour LEDs
- Uniform brightness
- Custom Sizing
- Light weight (Clean Profile)
- 7 year limited warranty
- UL Listed

BLANK OUT, LANE CONTROL, REGULATORY & WARNING SIGNS



YIELD TO

- Excellent day and night visibility
- LEDs are through mounted into solid state conformal coated printed circuit boards
- All LEDs meet the ITE standards for color and viewing angle
- Circuitry is designed so the display is discernible should an LED fail and does not result in failure of other LEDs
- LEDs are protected by a matte finish polycarbonate protective overlay
- Engineered to withstand 110 mph winds
- Minimum projected life of 50,000 hours
- Housing made from .125" powder coated aluminum
- All commonly used photocells can be built into the signs
- Meets the visibility standards of the FWHA and the MUTCD

BLANK OUT SIGNS

- Sizes range from 24" up to 60" wide
- Visible from at least 700 yards when illuminated with automatic dimming at night
- Blank black face when not illuminated
- Single or multiple image displays
- Internal power supplied for each display
- Designed to deliver constant power to the LEDs
- Meets all relevant standards and have passed the following tests:
 - IAW NEMA TS2 vibration requirements
 - MIL-STD-810, Method 502.4, Procedure II Cold weather to –55°C - MIL-STD-883, Method 2007, Condition A – Vibration
- NEMA 3R housings are made from .125" marine grade aluminum with sun visors
- All hardware is stainless steel
- Multiple mounting options and hardware available



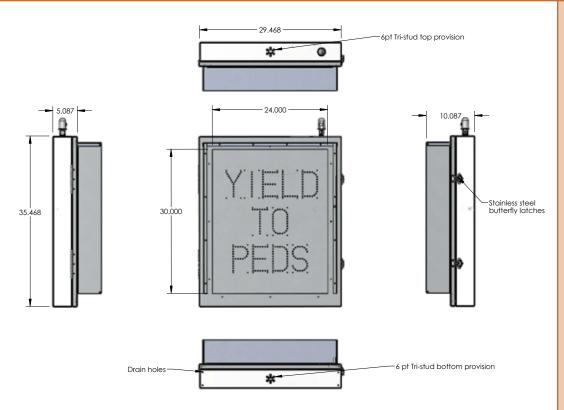


LANE CONTROL SIGNS

- Standard display size of 18"
- Incorporates all of the features and designs of blank out signs
- Up to 5 messages including the green down arrow and red X
- Double row LED displays

ILLUMINATED REGULATORY & WARNING MUTCD SIGNS

- Excellent visibility at night, always visible and lit with LEDs
- Variation of the Clean Profile Sign sized for Regulatory Signs
- Ideal for use in areas with limited visibility such as fog or underpasses
- All standard MUTCD displays are available as well as customized variations
- The standard light engine is the same LED strips that are used in Southern's internally illuminated street name signs and are rated for 60,000 hours



BODY AND DOOR FRAME

The body and door frame is produced using high grade aluminum. The bodies are continuously welded for superior strength and weather protection. Neoprene gaskets provide a tight seal around the lenses and doors. Full length stainless steel hinges are used on our sign bodies. The doors are double channeled for a weather tight seal. The door frame and body is powder coated with black satin and other finishes are available as well. The butterfly latches are stainless steel and quick release. Glare shields are also available.

LIGHT EMITTING DIODES (LED)

The LED package is a T1 3/4 and uses a white or clear lens. Each LED is parallel wired to insure independent operation and prevent sequential failure. The LED's are under driven by 30-35% to increase reliability.

POWER SUPPLY

The input voltage is 120 to 240 volts A/C, at 50/60 hertz, switch selectable. Each sign is designed with over current and transient protection.





Enclosures

Southern Manufacturing offers a complete line of ITS and Traffic enclosures. In addition, Southern designs and manufactures aluminum, steel and stainless steel enclosures for a wide variety of industries including roadway, stadium and general lighting, SCADA, solar energy, water treatment, waste water treatment, water parks, industrial control and light rail. The options and variety are almost endless. Southern enclosures can be designed and constructed to several industry standards including UL, cUL, IEC and NEMA.

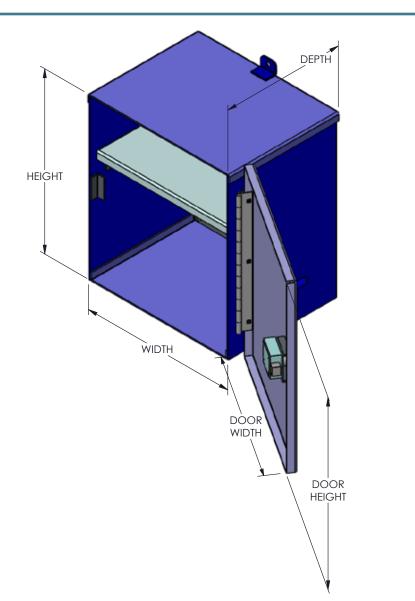
UTILITY ENCLOSURES



STANDARD FEATURES

- Proudly Made In America at our ISO 9001:2008 registered facility
- Constructed from .125" thick 5052-H32 marine grade aluminum
- Single point latching
- Lock is a slam, Corbin style, keyed # 2 lock w/ two keys
- Pad has a lockable hasp
- Hinge is heavy duty and tamper proof continuous 14 gauge stainless steel
- Permanently bonded neoprene door gasket
- Screened louvers for ventilation
- Mounting flanges for pole or wall
- Back panel is .125" thick aluminum
- Shelf is fixed .125" thick aluminum





UTILITY ENCLOSURES		Mounti	ng Options				
Enclosure Dimensions	Enclosure No.	Enclosure Type	Type Description		Pole	Wall	Pedestal
12'H X 10"W X 6"D		RHUB	Remote Hub	n/a	Opt	Std	Opt
24'H X 24"W X 12"D		LHUB	Local Hub	n/a	Opt	Std	Opt
14'H X 11"W X 14"D	I		Flasher	n/a	Opt	Std	Opt
16'H X 11"W X 11"D	I		Flasher	n/a	Opt	Std	Opt
16'H X 12"W X 10"D	I		Flasher	n/a	Opt	Std	Opt
16'H X 14"W X 11"D	I		Flasher	n/a	Opt	Std	Opt
16'H X 14"W X 14"D	I		Flasher	n/a	Opt	Std	Opt
16'H X 16"W X 11.563"D	I		Flasher	n/a	Opt	Std	Opt
16.25'H X 14"W X 12"D	I		Flasher	n/a	Opt	Std	Opt
27"H X 15"W X 12"D	II		Flasher	Opt	Std	Opt	Opt

TRAFFIC ENCLOSURES



STANDARD FEATURES

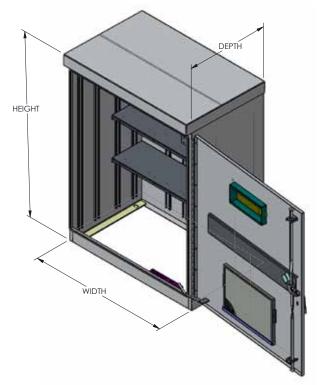
- Proudly *Made In America* at our ISO 9001:2008 registered facility
- Available in base or pole mounting
- Constructed to NEMA 3R standards and UL Listed
- Constructed from .1875" thick 5052-H32 marine grade aluminum with a mill finish
- Cantilever roof slopes towards rear to prevent standing water
- Vent slots on the underside of roof over-hang with insect screen
- Double flanged door opening all around
- Permanently bonded neoprene gasket
- Handle is pad lockable, heavy duty, 3/4" stainless steel with internal seal
- Lock for the main door is a deadbolt, Corbin style keyed #2 w/ two keys.
- Police door w/skeleton lock & key
- Latching is three point with a stainless steel center cam and nylon rollers for top and bottom strikers
- Door stop rod is plated steel with three positions (90, 120 & 180 deg.)
- Louvers in door and a woven fiberglass disposable air filter
- Fan plenum, for single 4" fan
- Heavy duty stainless steel hardware
- Hinge is heavy duty and tamper proof continuous 14 gauge stainless steel
- Equipment mounting rails are mounted on the back and side walls
- Two shelves 11"D
- Door switch bracket to accommodate two .5" diameter switches

ENCLOSURE OPTIONS

- Drawer with a pull out with non slip surface
- Auxiliary compartment
- Fan plenum, 6" single fan
- Fan plenum, 4" and 6" dual fans with divider
- Back panel
- Saw tooth mounting rails
- Flush mount police door
- Fan and light kits
- Custom lock keying
- Metal washable air filter
- Pleated air filter
- Aluminum air filter cover

RISERS OPTIONS:

- Available in solid or split designs
- Multiple heights available
- Available with shelves



TRAFFIC ENCLOSURE		Mounti	ing Options				
Enclosure Dimensions	Enclosure No.	Enclosure Type	Description	Base	Pole	Wall	Pedestal
32"H X 20"W X 14"D		TS	TS Standard Traffic		Std	Opt	Opt
41"H X 24"W X 16"D		G	Standard Traffic	Opt	Std	Opt	Opt
50"H X 30"W X 16.5"D	IV	М	Standard Traffic	Std	Opt	Opt	Opt
50"H X 30"W X 16.5"D	IV	M-DD	Front & Rear Doors	Std	Opt	Opt	Opt
50"H X 36"W X 16.5"D	IV	M-36	M-36 Wide M		Opt	Opt	Opt
60"H X 30"W X 16.5"D	IV	MSX	Stretched M	Std	Opt	Opt	Opt
60"H X 36"W X 16.5"D	IV	MSX-36	Wide-Stretched M	Std	Opt	Opt	Opt
59"H X 38"W X 26"D	V	P-38	Standard Traffic	Std	Opt	Opt	Opt
59"H X 40"W X 26"D	V	Р	Standard Traffic	Std	Opt	Opt	Opt
59"H X 40"W X 26"D	V	P-DD	Front & Rear Doors	Std	Opt	Opt	Opt
59"H X 44"W X 26"D	V	P-44	Standard Traffic	Std	Opt	Opt	Opt
59"H X 44"W X 26"D	V	P-44-DD	Front & Rear Doors	Std	Opt	Opt	Opt
75"H X 40"W X 26"D	VI	R	Standard Traffic	Std	Opt	Opt	Opt
75"H X 44"W X 26"D	VI	R-44	Standard Traffic	Std	Opt	Opt	Opt
75"H X 44"W X 26"D	VI	R-44-DD	Front & Rear Doors	Std	Opt	Opt	Opt
77"H X 44"W X 26"D	VI	R-44	Standard Traffic	Std	Opt	Opt	Opt
77"H X 44"W X 26"D	VI	R-44-DD	Front & Rear Doors	Std	Opt	Opt	Opt

CALTRANS STYLE ITS ENCLOSURES







STANDARD FEATURES

Common designations: 333, 334, 334ED, 334D, 334SED, 336, 336S and 340

- Proudly Made In America at our ISO 9001:2008 registered facility
- Enclosure is constructed to NEMA 3R standards and UL Listed
- Available in base or pole mounting
- Constructed from .125" thick 5052-H32 marine grade aluminum with mill finish
- Pagoda style top with screened vents to prevent standing water
- Doors designed for 100 pound per vertical foot of door height load
- Louvers are provided in front and rear doors
- Washable, metal air filter and louvered metal filter cover
- Door openings are double flanged all around
- Doors are provided with permanently bonded, neoprene gaskets
- Handles are pad lockable, heavy duty, 3/4" stainless steel with internal gasket
- Corbin style locks, keyed #2 with two keys
- Latching has a three point stainless steel center cam and nylon rollers for top and bottom strikers
- Door stop rods, aluminum, two position door stop rods (90° & 120°)
- Hinges are tamper proof heavy duty 14 gauge stainless steel
- Fan plenum plate for dual 4" fans and thermostat mounting bracket
- 19" EIA rack frame, electrolytic zinc plated and 10 gauge steel tapped #10-32
- Heavy duty type 304 stainless steel enclosure hardware
- Document pouch is 12" x 15" and re-sealable on the front and rear doors
- Door switch bracket accommodates two 1/2" diameter switches in both doors
- Light fixture brackets in the front and rear
- Two lifting eyes are heavy duty aluminum and designed to support 1000 lbs

SHELF OPTIONS

- Full depth shelf, rack mounted and adjustable with 4 point attachment
- 14" depth self, rack mounted and adjustable with 2 point attachment
- Heavy duty self, rack mounted and adjustable with 4 point attachment
- Pull out drawer, rack mounted and adjustable with a non slip surface
- DIN mounting panels, rack mounted and available in 3, 4, and 5 RU

LIGHTING OPTIONS

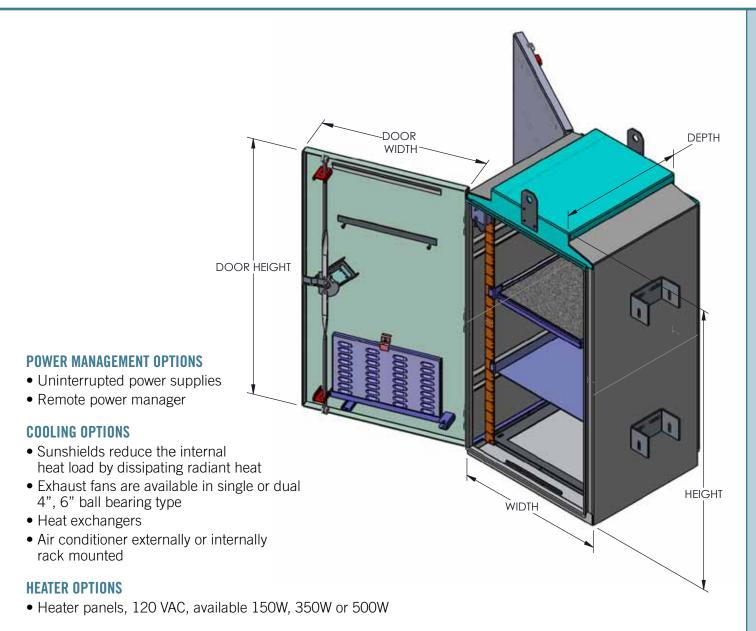
- Light with standard fluorescent, 120 VAC and door activated
- Light with high efficiency LED, 120 VAC or 12 VDC and door activated

SERVICE ENTRANCE POWER PANELS OPTIONS

- Rack mounted or side mounted
- 120 VAC, single phase
- 120/240 VAC, split phase

GENERATOR COMPARTMENT OPTION

- 120 VAC, 30A, single phase
- 120/240 VAC, 50A, split phase



INSULATION OPTIONS

- Flexible, trapped air, 5/16" thick, foiled faced polyethylene R-4
- Rigid, Thermax, ¾" thick, foiled faced polyisocyanurate R-4
- Rigid board, 3/4" thick, extruded polystyrene R-3.75

300 SERIES INTELLIGENT TRANSPORTATION System Enclosure			Mounting Options			Enclosure Options					Rack Options								
Enclosure Dimensions	Enclosure Type	Description	Base	Pole	Pedestal	Sun Shields	Louvers	Police Door	Generator Comp	Fan	A/C	19" EIA Rack	Light	STD Shelf		Pullout Drawer			
39"H X 24"W X 20"D	336	336	Opt	Std	Opt	Opt	Std	Opt	Opt	Opt	Opt	Std	Opt	Opt	Opt	Opt	Opt	Opt	Opt
46"H X 24"W X 20"D	336S	336 Stretch	Opt	Std	Opt	Opt	Std	Opt	Opt	Opt	Opt	Std	Opt	Opt	Opt	Opt	Opt	Opt	Opt
46"H X 24"W X 30"D	336SED	336S Stretch Extended Depth	Std	Opt	Opt	Opt	Std	Opt	Opt	Opt	Opt	Std	Opt	Opt	Opt	Opt	Opt	Opt	Opt
67"H X 24"W X 30"D	332	332	Std	Opt	n/a	Opt	Std	Opt	Opt	Opt	Opt	Std	Opt	Opt	Opt	Opt	Opt	Opt	Opt
67"H X 24"W X 35"D	332ED	332 Extended Depth	Std	Opt	n/a	Opt	Std	Opt	Opt	Opt	Opt	Std	Opt	Opt	Opt	Opt	Opt	Opt	Opt
90"H X 24"W X 35"D	332SED	332 Stretched Extended Depth	Std	n/a	n/a	Opt	Std	Opt	Opt	Opt	Opt	Std	Opt	Opt	Opt	Opt	Opt	Opt	Opt
67"H X 44"W X 26"D	340	340 Quad Doors	Std	n/a	n/a	Opt	Std	Opt	Opt	Opt	Opt	Std	Opt	Opt	Opt	Opt	Opt	Opt	Opt
67"H X 48"W X 30"D	334D	334D Quad Doors	Std	n/a	n/a	Opt	Std	Opt	Opt	Opt	Opt	Std	Opt	Opt	Opt	Opt	Opt	Opt	Opt

BATTERY BACKUP SYSTEM ENCLOSURES (BBS)



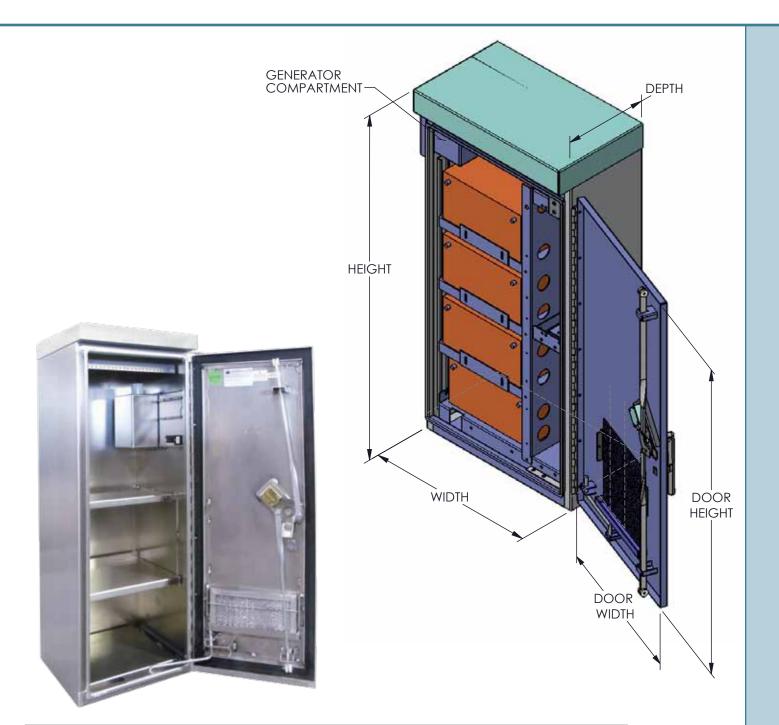


STANDARD FEATURES

- Proudly *Made In America* at our ISO 9001:2008 registered facility
- Available in base or pole mounting
- Constructed to NEMA 3R, 4, 4X standards and UL Listed
- Constructed from .125" thick 5052-H32 marine grade aluminum with mill finish
- Cantilever roof slopes toward the rear to prevent standing water
- Vent slots on the underside of roof over-hang with insect screen
- Door opening is double flanged
- Doors have a permanently bonded neoprene gasket
- Handles are pad lockable, heavy duty, 3/4" stainless steel with internal gasket
- Main door lock is a deadbolt Corbin style keyed #2 w/ two keys
- Latching has a three point stainless steel center cam and nylon rollers for top and bottom strikers
- Door stop rod is yellow zinc plated steel with three positions (90, 120 & 180 deg.)
- Louvers in door and a woven fiberglass disposable air filter
- Fan plenum, 4" singe fan
- Heavy duty stainless steel hardware
- Hinges are tamper proof heavy duty 14 gauge stainless steel
- Equipment mounting rails mounted on back and side walls
- Shelves are heavy duty battery shelves
- Accommodations for rack or shelf mounted equipment
- Door switch bracket to accommodate two 1/2" diameter switches

ENCLOSURE OPTIONS

- Rails to mount rack mounted inverters and other components
- Pull out drawer with a non slip surface
- Generator compartment with plug and optional indicator light
- Fan plenum, 6" single fan
- Fan and light kits
- Custom lock keying
- Metal washable air filter
- Pleated air filter
- Aluminum air filter cover



BATTERY BACK SYSTEM ENCLOSURES											
Enclosure Dimensions	Enclosure Type	Base Mount	Pole Mount	Wall Mount	Piggyback Mount	Gen Port					
34'H X 18.5"W X 12"D	BBS	Opt	Opt	Opt	Std	Opt					
40'H X 20"W X 10"D	BBS	Opt	Opt	Std	Opt	Opt					
41'H X 24"W X 16"D	BBS	Opt	Opt	Std	Opt	Opt					
42'H X 12"W X 08"D	BBS	Std	Opt	Opt	Opt	Opt					
43"H X 20"W X 13"D	BBS	Std	Opt	Opt	Opt	Opt					
48"H X 17"W X 17"D	BBS	Opt	Opt	Std	Opt	Opt					
48"H X 20"W X 14"D	BBS	Std	Std	Opt	Opt	Opt					
50"H X 24"W X 13"D	BBS	Std	Opt	Opt	Opt	Std					
58"H X 30"W X 17"D	BBS	Std	Opt	Opt	Opt	Std					

SPECIALTY ENCLOSURES & OTHER PRODUCTS



CAN'T FIND THE RIGHT ENCLOSURE?

Contact Southern Manufacturing and let our experienced team design the right solution for your application.

Our staff of Mechanical and Electrical engineers use advanced 3D Modeling to develop solutions to meet your needs

OUR SERVICES INCLUDE:

- Environmental Monitoring & Control
- Power Distribution
- Generator Back Up Systems
- Uninterrupted Power Source
- Battery Back Up Systems
- Remote Power Monitoring & Management

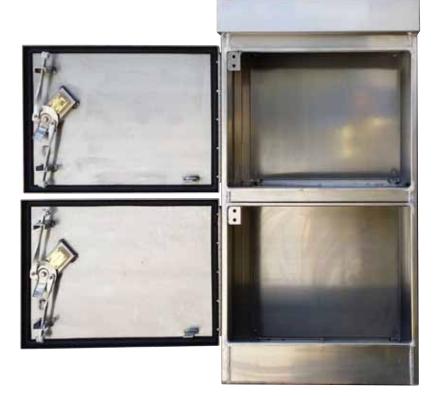
UTILITY ELECTRICAL SERVICE ENCLOSURE





DUAL CHAMBER SCADA ENCLOSURES





ROADWAY LIGHTING ENCLOSURES









UNINTERRUPTED POWER SOURCE ENCLOSURES





QUALITY POLICY

To achieve total customer satisfaction...

Quality is our Commitment

The quality of products and services will always be a number one priority.

Customer Focus is the Key

Our goal is to communicate effectively with our customer and provide a level of expertise, skill and capability that meet or exceed all of their expectations.

Continuous Improvement Paves the Way

We will always strive to operate more efficiently and provide better products and services to our customers.

Safety is Always Paramount...

Safety will never be sacrificed in order to meet our other objectives