

SUNS[®]

International, LLC

• Innovation • Quality • Service



Safety Limit Switches



Safety Switches



ATEX/EXX Switches



Micro Switches



Push Buttons
Indicator Lights



Toggle Switches



Rocker Switches



Sensor and Controls



Elevator Interlocks



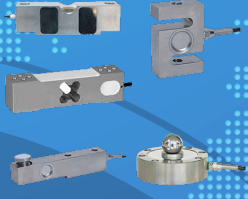
Pendant/Control Stations



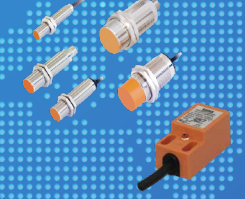
Outdoor Power
Equipment Controls



Load Cells



Proximity Sensors



Signaling Devices



Foot Switches



Industrial Joysticks



Vehicle Controls



CANBUS Keypads



CANBUS I/O Modules
Solid State Controls



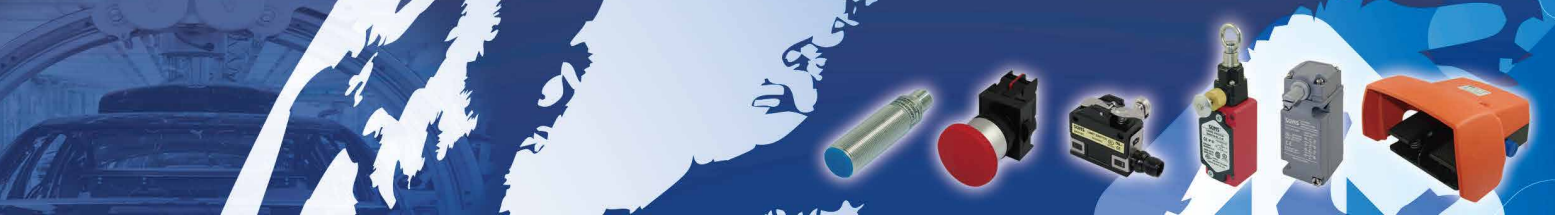
CANBUS Displays



2023

Industrial Control Components

<http://www.suns-usa.com>



Safety Limit Switches

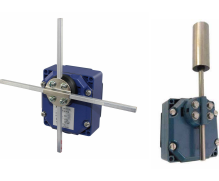


Product Family	SMN/SMN4	SND4/SN4	SND2/SN2	SND6/SN6
Product Picture	 Plastic Plastic Metal	 Plastic Metal	 Plastic Metal	 Plastic Metal
Body Dimensions (mm) LxWxH	SMN: 26 x 34 x 21 SMN4: 30 x 30 x 45	30.5 x 32 x 62	SND2: 50.5 x 32.5 x 50.5 SN2: 52 x 33 x 64	40.5 x 40 x 74
Contact Configuration	1NO/1NC, 2NO, 2NC	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC	1NO/1NO, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC	1NO/1NO, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC
IP/NEMA Ratings	IP66 / NEMA 4, 4X, 6	IP67 / NEMA 4, 6	IP67 / NEMA 4, 4X, 6	IP67 / NEMA 4, 6
Contact Ratings	A600/Q300	A600/Q300	A600/Q300	A600/Q300

Product Family	SN62	SN63	AZ8	SN5/SMN5
Product Picture	 Metal	 Metal	 Metal Base	 Metal
Body Dimensions (mm) LxWxH	40 x 40.4 x 69.3	57 x 36 x 70	28 x 25 x 64	33 x 33x 60.5
Contact Configuration	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO, 2NO/2NC	1NO/1NC, 2NO, 2NC (Snap action or Slow action)
IP/NEMA Ratings	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6	IP65 / NEMA 4, 12, 13	IP66(NEMA 4, 4X, 6)
Contact Ratings	A600/Q300	A600/Q300	A600/Q300	A600/Q300

Product Family	HMS/HLS Heavy Duty NEMA Style	HNS Heavy Duty NEMA Style	SP9 Enclosed Limit Switches	SF9 Enclosed Limit Switches
Product Picture	 Metal Metal	 Metal Stainless steel	 Metal	 Metal
Body Dimensions (mm) LxWxH	HMS: 42 x 44.6 x 80 HLS: 42 x 44.6 x 102.5	42 x 44.6 x 102.5	93 x 51.3 x 65	102.2 x 33 x 54.8
Contact Configuration	HMS: 1NO/1NC HLS: 1NO/1NC, 2NO/2NC	1NO/1NC, 2NO/2NC	SPDT/DPDT	SPDT/DPDT
IP/NEMA Ratings	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6	IP65 / NEMA 4	IP65 / NEMA 4
Contact Ratings	A600/Q300	A600/Q300	10A, 15A, 20A, 25A (125, 250, 480V)	10A, 15A, 20A, 25A 125/250/480VAC

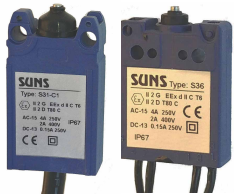
Product Family	SN31 Pre-wired (IP67)	SN32 Pre-wired (IP67)	SM31/SM31N Modular(IP67)	SM32/SM32N Modular(IP67)
Product Picture	 Metal	 Metal	  Metal Plastic	  Metal Plastic
Body Dimensions (mm) LxWxH	30 x 16 x 50	40 x 16 x 50	SM31: 30 x 16 x 50 SM31N: 30 x 16 x 50	SM32: 37.3 x 16 x 50 SM32N: 37.3 x 16 x 50
Contact Configuration	1NO/1NC (snap or slow action)	1NO/1NC (snap or slow action)	1NO/1NC, 2NO, 2NC, 2NO/1NC 2NC/1NO, 2NO/2NC (snap or slow action)	1NO/1NC, 2NO, 2NC, 2NO/1NC 2NC/1NO, 2NO/2NC (snap or slow action)
IP/NEMA Ratings	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6
Contact Ratings	A300/Q300	A300/Q300	B300/R300	B300/R300

Product Family	SNB/SNBP Crane Limit Switches	SNH Belt Alignment Switches	MP50 Bistable Magnetic Switches	HEN Environmentally Sealed
Product Picture	  Metal Plastic	 Metal	 Metal	 Stainless Steel
Body Dimensions (mm) LxWxH	SNB: 77 x 35.6 x 81 SNBP: 73 x 37 x 81	85 x 53 x 85	104 x 52 x 47	66 x 25 x 25
Contact Configuration	2NO/2NC, 4NC	1NO/1NC, 2NO, 2NC	1NO/1NC, 1NO, 1NC, 2NO, 2NC	1NO/1NC, 2NO/2NC, 4NO/4NC
IP/NEMA Ratings	IP66 / NEMA 4	IP54 / NEMA 5	IP67	IP67
Contact Ratings	A600/Q300	A600/Q300	1A/120V 0.5A/250V	7A/28VDC

Product Family	SN1 Precision Limit Switches	SN9 Enclosed Limit Switches	CP8104 Heavy Duty Limit Switch	6098
Product Picture	 Metal	 Metal	 Metal	
Body Dimensions (mm) LxWxH	44.5 x 18 x 32.4	86 x 25.5 x 44.6	100 x 61 x 120	80 x 40 x 140
Contact Configuration	SPDT	SPDT/DPDT	1NO/1NC, 2NO, 2NC, 3NO/3NC, 4NO/4NC	1NC, 1NO, 2NC, 2NO
IP/NEMA Ratings	IP67 / NEMA 4, 6	IP60 or IP66 (NEMA 4)	IP67 / NEMA 4, 6	
Contact Ratings	5A 250VAC / 5A 30VDC	10A, 15A, 20A, 25A (125, 250, 480V)	25A/600V, A600/Q300	5A 120/250VAC 2.5A 120/250VDC

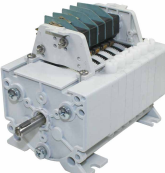


ATEX, Class I, Class II Switches for Hazardous Environment

Product Family	EEX-S31/S32/S35/S36	X3V/X4V	EEX-PB30 (CSP)	EEX-SN31/32
Product Picture				
Dimensions (mm)	25.5 x 11 x 46.2 25.5 x 17.6 x 46.2	40 x 18 x 10	Various	40 x 42 x 78
Characteristics	II 2G EEx d IIC Gb I M2 EEx d I Mb 94V-0 plastic	II 2G EEx d IIC Gb I M2 EEx d I Mb	II 2G EEx d IIC Gb I M2 EEx d I Mb - Pushbutton, Selector Emergency Stop - Control Stations	II 2G EEx d IIC Gb I M2 EEx d I Mb
Contact Ratings	A300/Q300	250VAC	A300/Q300	A300/Q300
IP/NEMA Ratings	IP67	IP54	IP67	IP67

Product Family	HCX	SP9-EX	HES	HEX
Product Picture				
Dimensions (mm)	101.6 x 101.6 x 101.4	93 x 51.3 x 65	69 x 53.5 x 155.5	73 x 52 x 141.5
Characteristics	- Class I and Class II - Explosion-proof - Cable entry: M25, 3/4NPT - SPDT, DPDT or 2-stage - Various head styles	- Class I and Class II - Explosion-proof - Cable entry: M20, 1/2NPT - 1NO/1NC or 2NO/2NC - Various head styles	- Class I and Class II - Explosion-proof - Cable entry: M20, 1/2NPT, 3/4NPT - 1NO/1NC, 2NO/2NC - Various head styles	- Class I and Class II - Explosion-proof - Cable entry: M20, 1/2NPT, 3/4NPT - 1NO/1NC, 2NO/2NC - Various head styles
Contact Ratings	10A, 15A, 20A, 125/250V	15A, 20A, 25A 125/250/480V	A300/Q300	A300/Q300
IP/NEMA Ratings	NEMA 2,4,4X,6,6P,7,9,12,13	NEMA 1, 7, 9	NEMA 2,4,4X,6,6P,7,9,12,13	NEMA 2,4,4X,6,6P,7,9,12,13

Specialty Limit Switches

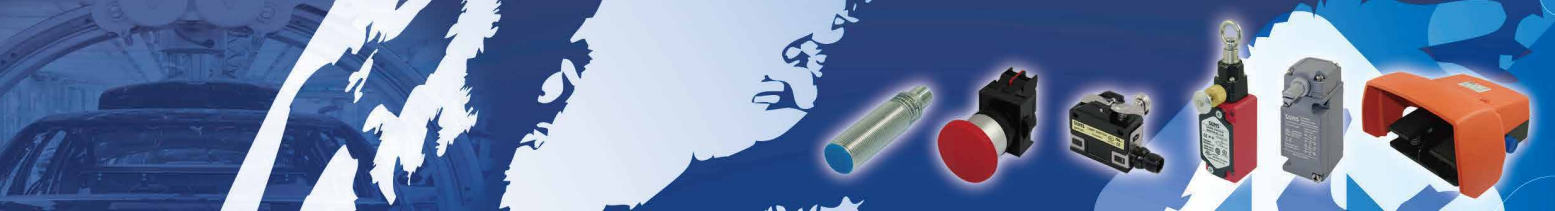
Product Family	SND4-NH Hall Effect Limit Switches	SN6/HNS-RF Wireless Limit Switches	SQA Geared Cam Limit Switches	SQC Geared Cam Limit Switches
Product Picture				
Dimensions (mm)	30.5 x 32 x 62	Various	136 x 98 x 81	136 x 98 x 81
Characteristics	- Conforms to EN50047 - Hall-effect sensor with output of 0-5VDC - Input voltage 10-30VDC - Cable entries: PG 13.5, M20, 1/2NPT - Various head styles	- Reliable, flexible and secure wireless transmission - Variety of antenna options - Extremely long battery life - Various head styles	- High precision gears for compact hoisting - Cam adjustments at fixed position - Various Housing for harsh environment	- High precision gears for compact hoisting - Cam adjustments at fixed position - Various Housing for harsh environment
Contact Ratings	Analog Output:0-5VDC		11A 1/2HP 125/250VAC	11A 1/2HP 125/250VAC
IP/NEMA Ratings	IP67	IP67	IP67	IP67

Safety Switches



Product Family	Key Interlock Switches	SM31N-91 Key Interlock Switches	SSD2191/4691 Solenoid Key Interlock	SS6391 Solenoid Key Interlock
Product Picture				
Body Dimensions (mm) LxWxH	Various	36 x 16 x 50	58 x 31.8 x 94 or 88.5 x 35.5 x 95	110 x 40 x 150
Enclosure Material	Fiber-reinforced plastic or Metal zinc die cast	Fiber-reinforced plastic	Fiber-reinforced plastic	Metal zinc die cast
Characteristics	- EN50041/EN50047 compatible - Positive opening contact - Galvanically separated contacts - Cable entry: PG11, M16, PG13.5, 1/2NPT, M20	- Epoxy potted - Positive opening contact - Galvanically separated contacts - Mounting spacing: 20mm	- Solenoid: 24V, 120 or 240V - Positive opening contact - Power-to-lock or power-to-unlock - Optional indicator light - Cable entry: 1/2NPT, M20	- Solenoid: 24V, 120 or 240V - Positive opening contact - Power-to-lock or power-to-unlock - Optional indicator light - Cable entry: 1/2NPT, M20
Contact Configuration	1NO/1NC, 2NC/1NO, 2NC, 3NC	1NO/1NC, 2NO, 2NC, 2NO/1NC 2NC/1NO, 2NO/2NC	2NC/1NO, 3NC, 2NO/2NC, 3NC/1NO, 4NC, 3NC/2NO, 4NC/1NO, 5NC	3NO/3NC, 4NO/4NC
IP/NEMA Ratings	IP67 / NEMA 4, 4X	IP67 / NEMA 4, 6	IP66 / NEMA 4, 4X	IP66 / NEMA 4, 4X
Contact Ratings	A600/Q300	B300/R300	A600/Q300	A600/Q300
Actuator				
Certificates				

Product Family	SS6191/SSD6191 Solenoid Key Interlock	SS6292 Solenoid Key Interlock	Hinge Safety Switch	Magnetic Safety
Product Picture				
Body Dimensions (mm) LxWxH	40 x 46 x 194	40 x 42 x 78	Various	Various
Enclosure Material	Fiber-reinforced plastic or Metal zinc die cast	Zinc alloy	Fiber-reinforced plastic	Fiber-reinforced plastic
Characteristics	- Solenoid: 24V, 120 or 240V - Positive opening contact - Power-to-lock or power-to-unlock - Optional indicator light - Cable entry: 1/2NPT, M20	- Conform to EN50041 - Positive opening contact - Up to 6 contacts - Cable entry: 1/2NPT, M20 - 4-direction installation	- Conform to EN50047 - Positive opening contact - Galvanically separated contacts - Cable entry: PG13.5, M20 1/2NPT	- Non-Contact - Coded or non-coded magnet - 10 million operations - Switching distance: 6-15mm, 9-18mm
Contact Configuration	2NO/2NC, 3NC/1NO, 4NC		1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO	
IP/NEMA Ratings	IP66 / NEMA 4, 4X	IP67 / NEMA 4, 6	IP67 / NEMA 4, 4X, 6	IP67(MP MH)/IP69K(MF)
Contact Ratings	A600/Q300	C150/R150	A600/Q300	400mA 100V 10mA 24VDC
Actuator				
Certificates				



Cable Pull Switches

Product Family	SN4170/SND4170	SN6170/SND6170	SN2170	SN6271
 Actuating force	 20N	 50N 80N	 20N	 150N
Body Dimensions (mm) LxWxH	30 x 31 x 62	40 x 42 x 78	52 x 33 x 64	40 x 40.4 x 69.3
Enclosure Material	Fiber-reinforced plastic or zinc alloy	Fiber-reinforced plastic or zinc alloy	Zinc alloy	Aluminum alloy
Characteristics	- Max span 5 meters (16 ft) - One-way or two-way actuation - Pull-on/pull-off option - Lock and resettable option - Cable entry: M20, PG13.5 1/2NPT	- Max span 15 meters (49 ft) - One-way or two-way actuation - Lock and resettable option - Cable entry: PG13.5, 1/2NPT, M20	- Max span 5 meters (16 ft) - Conforms to EN50047 - Positive opening contact - Galvanically separated contacts - Cable entry: PG13.5, M20 1/2NPT (x3)	- Max span 30 meters (98 ft) - Compatible to EN50041 - Positive opening contact - Galvanically separated contacts - Cable entry: PG13.5, 1/2NPT, M20
Contact Configuration	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO	1NO/1NO, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO	1NO/1NO, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO
IP/NEMA Ratings	IP67 / NEMA 4, 4X, 6	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6	IP67 / NEMA 4, 6
Contact Ratings	A600/Q300	A600/Q300	A600/Q300	A600/Q300
Actuator				Actuator can be on the left or right side.
Certificates				

Product Family	CP7170/8170	HES/HEX Explosion-proof	HNS	CP-61 Anti-Two-Block Switch
 Product Picture	 250N	 80N	 80N	
Body Dimensions (mm) LxWxH	72 x 61 x 120	100 x 61 x 120	42 x 44.6 x 102.5	187.5 x 64 x 36
Enclosure Material	Aluminum alloy	Aluminum alloy	Zinc alloy	Aluminum alloy
Characteristics	- Max span 80 meters (262 ft) for CP7170 - Max span 160 meters (524 ft) for CP8170 - Options: E-stop, indicator - Positive opening contact - Galvanically separated contacts	- Max span 160 meters (524 ft) - Options: E-stop, indicator - Positive opening contact - Galvanically separated contacts	- Max span 30 meters (98ft) - Heavy duty body	- Prevents unintentional contact between hook block and boom point - Electrical switch is completely sealed twice (both inside and outside housing) - Protective bracket
Contact Configuration	1NO/1NC, 2NO, 2NC, 3NO, 3NC, 2NO/1NC, 2NC/1NO	3NC/1NO, 2NO/2NC	3NC/1NO, 2NO/2NC	1NO/1NO, 2NO/2NC
IP/NEMA Ratings	IP67 / NEMA 4	IP67 / NEMA 4	IP67 / NEMA 4, 6	IP67
Contact Ratings	A600/Q300	A600/Q300	A600/Q300	A600/Q300
Actuator		Actuator can be on left right or both direction	Actuator can be on the left or right side.	Actuator can be on the left or right side.
Certificates				

Switches for Vehicles and Transportation



Product Family	ISP/INP/IMN Ignition Switches	DXP PTO Switches	PS Plunger Switches	DSW Seat Switches
Product Picture H W L Various				
Enclosure Material	Zinc or Plastic	Plastic	Plastic	Plastic
Characteristics	- Easy snap-in or nut mount - Available in 2, 3 or 4 pos - Various circuit configurations	- Easy snap-in installation - Standard .032 x .250 blade terminals	- Easy snap-in installation - Standard .032 x .250 blade terminals	- Easy snap-in installation - Standard .032 x .250 blade terminals
Contact Configuration	Various	2NO/2NC, 3NO/3NC,	1NO, 1NC, 1NO/1NC, 2NC	1NO, 1NC, 1NO/1NC, 2NC
IP/NEMA Ratings	IP55(front)/IP53(back)	IP53 (or IP67)	IP53 (or IP65)	IP53
Contact Ratings	20A/14VDC, 5A/60VDC	5A, 10A/14VDC	3A/14VDC	3A/14VDC
Product Family	IHP/IHM Ignition Switches	PL30 Ignition Switches	TL7 Toggle Switches	TN8/TL8 Toggle Switches
Product Picture H W L				
Enclosure Material	Zinc alloy or fiber reinforced plastic	Fiber-reinforced plastic	Phenolic	Zinc and fiber-reinforced plastic
Characteristics	- 22mm nut mount - Available in 2, 3 or 4 pos. - Various circuit configurations - Screw terminal or Dephi/Deutsch connectors	- Modern ignition design - Momentary push to start - 30mm mounting hole - Integrated connector	- 1, 2 pole circuitry - Available in industrial and mil grade - Maintained or momentary	- 1, 2 and 4 pole circuitry - Available in industrial and mil grade - 2 and 3 positions - Maintained or momentary
IP/NEMA Ratings	IP55(front)/IP53(back)	IPX9K(front)/IP67(back)	IP65	IP67 / IP69K
Contact Ratings	20A/14VDC, 8A/24VDC	4mA/150mA DC load	20A/125VAC, 10A/250VAC, 1.5HP 125/250VAC	20A/28VDC, 15A/277VAC, 6A/230VAC
Product Family	TW1	TR3 Rocker Switches	TR4 Rocker Switches	TR5A Rocker Switches
Product Picture H W L				
Enclosure Material	Fiber-reinforced plastic	Fiber-reinforced plastic	Fiber-reinforced plastic	Fiber-reinforced plastic
Characteristics	- Miniature design sealed toggle switch - 1, 2 pole circuitry - Maintained or momentary	- Tough and reliable rocker switch - 1, 2 pole circuitry - Maintained or momentary	- Tough and reliable rocker switch - 1, 2 pole circuitry - Maintained or momentary	- Tough and reliable rocker switch - 1, 2 pole circuitry - Maintained or momentary
Contact Ratings	5.0A 0.5VDC to 28VDC 5.0A 0.5VAC to 115VAC	20A/125VAC, 10A/250VAC, 1.5HP 125/250VAC	20A/125VAC, 10A/250VAC, 1.5HP 125/250VAC	20A/125VAC, 10A/250VAC, 1.5HP 125/250VAC
Product Family	TR5B/TR5C/TR5D Rocker Switches	PP22 Emergency Stop	BD150/BDS150 DC Disconnect	DHM DC Hour Meters
Product Picture H W L				
Enclosure Material	Fiber-reinforced plastic	Plastic (94-V0)	Fiber-reinforced plastic	Plastic
Characteristics	- Tough and reliable rocker switch - 1, 2 pole circuitry - Maintained or momentary	- Robust design for harsh environment - Dual O-ring seal - Self cleaning, IP67	- Safely rupture full load currents upon emergency - Optional auxiliary switch - IP55 rated	- Rugged design for true time stamp - 0-9999 hours Automatically recycle to zero
Contact Ratings	15A 125VAC / 10A 250VAC(GP) 1.5HP 125/ 250VAC 20A 4-14VDC / 15A 15-28VDC	12VDC, 24VDC, 48VDC, 120VAC, 240VAC	Up to 150A DC	6-50VDC

Switches for Vehicles and Transportation



Product Family	SRP/SRY/SRJ Rotary Sensor	HSS Speed Sensor	PH-12 Linear Pushbutton	HNP2 Hall Effect Paddle
Product Picture				
Enclosure Material	Fiber-reinforced Plastic	Fiber-reinforced Plastic	Fiber-reinforced Plastic	Fiber-reinforced Plastic
Characteristics	- Solid-state hall-effect sensor - Integrated reverse polarity short circuit protection - Voltage/PWM/Current output	- Quadrature speed and direction sensor with 4-wire - Differential Hall - Near zero speed	- Hall effect for reliable contactless switching - 10 million cycles - IP67	- Hall effect linear control - Positive tactile feedback - Analog or PWM outputs - IP67
Operating Voltage	5 VDC/ 10-30VDC @ 20 mA	9 V to 16 V @ 20 mA	4.5-5.5 VDC @ 9 mA	4.5-5.5 VDC @ 15 mA

Product Family	TRS Mini Trim Switches	ATV Vehicle Switches	BAL Backup Alarm	TL70/TL90 Warning Light
Product Picture				
Enclosure Material	Aluminum Alloy	Plastic (94-V0)	Fiber-reinforced Plastic	Fiber-reinforced Plastic
Characteristics	- Compatible with trim control - 2,4 or 8-way toggle action - Tactile or silent - Sealed to IP68S	- Compact size - Built-in cable gland - Fit 8.5 -10.5mm cables - Custom Control product	- Various voltage and sound pressure level - Universal mounting bracket - Sealed to IP65	- Pulse8 (8 flash per cycle) flash pattern - Perfect replacement solution for strobe beacon
Contact Ratings	2A/28VDC, 10mA/5VDC	12VDC	12-80VDC	12-80VDC/85-130VAC

Product Family	JST-2 Joystick	JST-4 Joystick	JST-6/JST-7 Joystick	VS/VT Shifter/Turn Signal
Product Picture				
Enclosure Material	Plastic housing w/ Zinc Column	Plastic housing w/ Zinc Column	Plastic housing w/ Zinc Column	Plastic housing with Zinc cast column
Characteristics	- Single axis hall effect joystick - For heavy duty industrial app. - 5 million operating cycles - SAE J1939 CAN output	- Dual axis hall effect joystick - For heavy duty industrial app. - 5 million operating cycles - SAE J1939 CAN output	- Single/dual axis hall effect - Various button/rocker option - Miniature base mounting - SAE J1939 CAN output	- Column size: 38, 45, 55mm - 2,3,4 and 6 speeds - Integral packard, Deutsch, wire harness - Handle deak weight: 160lbs
Operating Voltage	4.5-7.5 VDC	4.5-7.5 VDC	4.5-32 VDC	2A@12.8VDC (Solenoid load) arc suppression 3-32V

Product Family	SCB/SCJ CAN-BUS Keypad	SCIO CAN-BUS I/O	SCM CAN-BUS Control Module	SCD CAN-BUS Display Module
Product Picture				
Enclosure Material	Silicone Rubber	Fiber-reinforced Plastic	Cast Aluminum	Fiber-reinforced Plastic
Characteristics	- Rubber overmold for water and shock resistance - SAE J1939 CAN output - Up to IP69K	- Convert traditional signals (analog/digital) to CAN bus output - Up to IP69K	- CAN-BUS solid-state controller - Up to 42 high-side outputs - Reverse polarity protection - Up to IP69K	- For various vehicle functions - ISO 15765 OBD access - Custom I/O - Up to IP65
Operating Voltage	8-32VDC	8-32VDC	18-32VDC	9-32VDC

Elevator Door Safety Interlock



Product Family	SSD4 Latching Limit Switch	SM31N-91/SND4121 Door Interlock	SXP Door Interlock	EDC-5/ EDC-6 Door Contact
Product Picture				
Body Dimensions (mm) LxWxH	40 x 35 x 106(84 or 95.7)	SM31N: 30 x 16 x 77 SND4: 30 x 31 x 62	30 x 12.4 x 30 (33.6)	EDC-5: 52 x 16(19) x 31.5 EDC-6: 50 x 16(19) x 24.5
Enclosure Material	Fiber-reinforced plastic	Plastic (94-V0)	Plastic (94-V0)	Plastic (94-V0)
Characteristics	- Conforms to EN50047 - Positive opening contact - Remote reset - Galvanically separated contacts - 3-Conduit entries: M16	- Conforms to EN50047 - Positive opening contact	- Long service life - Pull to test function - Double break - Positive opening contact for SXP1	- Self-cleaning double break contact for long service life - Positive opening contact - B44-16 safety standard
Contact Configuration	1NO/1NC, 2NO, 2NC, 3NO 3NC, 2NC/1NO	1NO/1NO, NC, 3NC, 2NC/1NO	SPDT or DPDT	1NC, 2NC
IP/NEMA Ratings	IP66	IP67 (NEMA 4,6)	IP40	IP20/IP54(Only for 61-X4)
Contact Ratings	A600/Q300	A600/Q300	A300 (10A, 300V)	2A/230VAC; 2A/200VDC

Product Family	EDL-1 Door Contact	EDL-2 Door Interlock	EDL-3 Door Interlock	SS6291 Door Solenoid Interlock
Product Picture				
Body Dimensions (mm) LxWxH	129 x 36 x 87	133.9 x 70 x 277.5	194.5 x 71.5 x 278.1	247.7 x 48 x 42
Enclosure Material	Aluminum die cast	Aluminum die cast	Aluminum die cast	Zinc die cast
Characteristics	- Robust double break contact for elevators - Positive opening contact - B44-16 safety standard	- Robust double break contact for swing/slide door - Positive opening contact - B44-16 safety standard - Various shaft lengths and roller actuators	- Robust double break contact for swing/slide door - Positive opening contact - B44-16 safety standard - Various shaft lengths and roller actuators	- Safety solenoid Interlock for commercial/residential - 675lb key holding force - ASME A17.1/CSA B44 - ASME A17.4/CSA B44.1 - UL/QAI Certified
Contact Configuration	1NC	1NC	1NC + 1NC	2NC
IP/NEMA Ratings	IP20	IP20	IP20	IP65
Contact Ratings	2A/230VDC	2A/230VDC	2A/230VDC	0.5A/24VDC

Micro Switches

Product Family	ZP3/ZP3W Miniature Snap Switch	ZA/ZB4 Miniature Snap Switch	ZP4 Miniature Snap Switch	ZM4 Micro Switches
Product Picture				
Body Dimensions (mm) LxWxH	20 x 15.3 x 6.4	31.6 x 22.4 x 12.5	20 x 10 x 6.4	19.8 x 11.2 x 6.6
Current Rating	0.1A, 5A, 10A, 125/250VAC	0.1A, 1A, 10A, 125/250VAC 1/2 HP, 125VAC, 3/4 HP 250VAC	0.1A, 5A, 10A, 125/250VAC	0.1A, 5A, 10A, 125/250VAC

Micro Switches



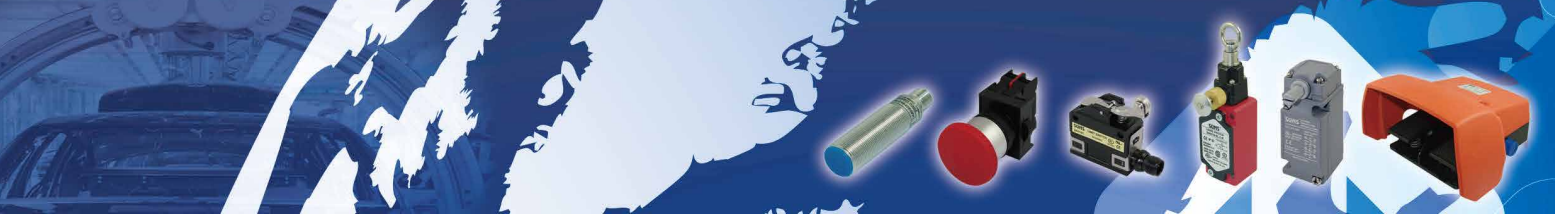
Product Family	X3/X4 Sub-Miniature	X3M Sub-Miniature	ZM3 Sub-Miniature	ZM3M Sub-Miniature
Product Picture				
Body Dimensions (mm) LxWxH	X3:12.7 x 8.9 x 5.0 X4:13 X 9 X 5.1	15.7 x 15 x 8	19.8 x 12.4 x 6.4	22.1 X 15.2 X 8.8
Current Rating	X3(5A/7A 250VAC, 1A 125VAC)	X3(5A/7A 250VAC , 1A 125VAC)	0.1,1,5,11A,1/4HP 125/250VAC 5A 30VDC	0.1,1,5,11A,1/4HP 125/250VAC 5A 30VDC

Product Family	VA-16G/VS-16G VB-16G/VM-16G	VS-W	VS16-AC/VM16-AC ZM3-AC	VP/VC
Product Picture				
Body Dimensions (mm) LxWxH	27.8 x 10.3 x 13.1	33 x 10.3 x 15.9	Various	27.8 x 10.3 x 13.1
Current Rating	16A 1/2HP 125/250VAC	0.1A, 3A, 5A, 11A, 16A 1/2HP 125/250VAC	16A 1/2HP 125/250VAC	0.1A, 3A, 5A, 11A 1/2HP 125/250VAC

Product Family	Z-15/20/25G	ZY-10G/ZD-10G	ZS-15G	SW31/32
Product Picture				
Body Dimensions (mm) LxWxH	49.2 x 17.5 x 24	49.2 x 17.4 x 27.9(22.7)	49.2 x 17.4 x 24.3	63.6 x 21.1 x 26.2(30)
Current Rating	15A/20A/25A 125/250/480VAC	10A 1/2HP 125/250VAC	15A 125/250/480VAC	10A 1/2HP 125/250VAC

Product Family	LS	SLD-7	S-72	S-13/14/19/20
Product Picture				
Body Dimensions (mm) LxWxH	50 x 20.6 x 10.5	35 x 11 x 17.2(28.8)	23.2 x 10.2 x 22.6	46.3 x 15.8 x 16.3(28.6)
Current Rating	5A 28VDC 125/250VAC	10A or 15A 1/2HP 125/250VAC	10A 125/250VAC	15A/25A 250VAC

Product Family	TS-01	ZT1H	ZX10	SN7
Product Picture				
Body Dimensions (mm) LxWxH	54.6 x 38.1 x 4.8	49.2 x 32 x 17.4	49.2 x 17.5 x 24	54 x 21.4 x 43
Current Rating	5A/7A 250VAC	1A 125/250VAC	10A/125VDC;3A/250VDC	10A 250VAC



Indicator Lights and 12/16/18/22/30mm Operators



Product Family	IL-1	IL-2	IL-3	IL-4
Product Picture		 M8x0.5	 M12x1	
	Indicator Lights	Indicator Lights	Indicator Lights	Indicator Lights
Mounting Hole Diameter	5/16" (8mm)	8.2mm	12.2mm	1/2" (12.7mm)
Available Colors	Red, blue, green, amber			
Lamp Voltage	6, 12, 24, 48, 120, 240V			
IP/NEMA Ratings	IP40	IP40 (IP65 with seal)	IP40 (IP65 with seal)	IP40 (IP67 with seal)

Product Family	IL-5	IL-6	PB16-EP/ET	PB16-S2/SK2
Product Picture				
	Indicator Lights	Indicator Lights	Pushbuttons/E-Stop	Selector Switches
Mounting Hole Diameter	3/4" (18mm)	22mm	16mm	
Characteristics	- Available colors: red, blue, green, amber, white		- Available colors: red, blue, green, amber, black - 1NO/1NC, 2NO or 2NC	
Lamp Voltage	6, 12, 24, 48, 120, 240V		24, 120, 240V	
IP/NEMA Ratings	IP65	IP40	IP40	

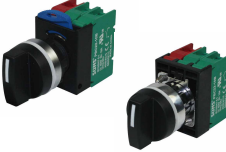
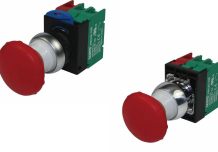
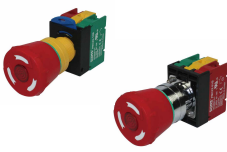
Product Family	MB22	PBL16 Low Profile illuminated 16mm Pushbuttons
Product Picture	 Pushbuttons Selector Switches Key Selector Switches E-Stop/Turn Release	
Mounting Hole Diameter	22mm	16mm
Characteristics	- Various styles and colors: red, blue, green, amber, white - 1NO/1NC or 2NO/2NC	- Various styles and colors: red, blue, green, amber, white - 1NO, 1NC, 1NO/1NC or 2NC
Lamp Voltage	12, 24, 36, 48, 120, 240V	12, 24, 36, 48, 120, 240V
IP/NEMA Ratings	IP40	IP65/IP69K

Product Family	PP12	PM16	PW22 Marine Pushbutton	CPB Capacity Pushbutton
Product Picture				
	Pushbuttons	Pushbuttons	Pushbutton	Capacitive Pushbutton
Mounting Hole Diameter	12mm	16mm	22mm	45mm/60mm
Characteristics	- Available colors: red, blue, green, amber - 1NO/1NC	- Available colors: red, blue, green, amber - 1NO/1NC - Momentary or Maintained	- Illuminated - Custom legends - Momentary or Maintained	- Robustic plastic - Two-color indicator - Momentary or Maintained - Output: PNP-NO or NPN
Lamp Voltage	5A/30VDC, 5A/125VAC	10A/30VDC, 10A/125VAC	10-30VDC	10-30VDC
IP/NEMA Ratings	IP67/IP68	IP67/IP68	IP65	IP69K



22mm Operators (NEMA 4, 4X, 6, 6P, A600/Q600)



Product Family	EM22	PB(M)22-S/SL	PB(M)22-ES	PB(M)22-ET
Product Picture				
	Emergency Stop	Selector Switch	Emergency Stop	Emergency Stop
Mounting Hole Diameter	22mm	22mm	22mm	22mm
Characteristics	- All metal construction - Push-pull - Resistant to impact, vibration and shock	- Plastic or metal - 3 or 2-position - Momentary or maintained	- Plastic or metal - Push-pull	- Plastic or metal - Turn release - Standard and illuminated
Lamp Voltage	6, 12, 24, 120, 240V		6, 12, 24, 120, 240V	6, 12, 24, 120, 240V
IP/NEMA Ratings	IP67 and IP69K	IP67 (or IP69K)	IP67 (or IP69K)	IP67

Product Family	PB22-EPL	PB22-ETL	PB22-MFS	PB22-S2L/S3L
Product Picture				
Mounting Hole Diameter	22mm	22mm	22mm	22mm
Characteristics	- Available colors:red, blue, green, yellow, white - Standard and illuminated	- E-stop/turn release	- Available colors:red, green - Standard and illuminated	- Various switching - 1NO/1NC - Standard and illuminated
Lamp Voltage	6,12,24,120,240V		6,12,24,120,240V	
IP/NEMA Ratings	IP65	IP65	IP65	IP65

30mm Operators (IP65, NEMA 4, 4X, A600/Q600)



Product Family	PBM30				
Product Picture					
Characteristics	- Plastic or zinc die cast body - Available button colors: red, blue, green, amber, black, white, yellow - Extend, Flush or Guarded - Maintained or momentary - Styles: key switch, joystick, emergency stop, break glass - Potentiometer available in: 1K, 2.5K, 5K, 10K, 25K - Selector style available in 2, 3, 4 positions - 6,12,24,48,120,240,380,600V				

SS12/16/19/22/30 Sealed Anti-Vandal Switch

Product Family	12mm	16mm	19mm	22mm	30mm
Product Picture					
Characteristics	- Stainless steel or nickel plated brass housing - 6, 12, 24, 120, 240V LED options - Robust long life design, IP65 rated - Available in momentary or maintained styles				



Control Stations/Pendant Stations/Signaling Device/Others



Product Family	CSP-22	CSP-30	CSZ-22/30	CSS
Product Picture				
	22mm Control Stations	30mm Control Stations	Control Stations	Pendant Stations
Dimensions (mm)	Various	Various	Various	
Characteristics	- Robust fiber reinforced plastic - Available 1 to 5 holes	- Robust fiber reinforced plastic - Available 1 to 3 holes	- Zinc or aluminum die cast - Available 1 to 6 holes	- Stainless steel - Available 1 to 20 holes - Accept custom order
Contact Ratings	A600/Q600	A600/Q600	A600/Q600	A600/Q600
IP/NEMA Ratings	IP65 / NEMA 4 / 4X	IP65 / NEMA 4 / 4X	IP65 / NEMA 4	IP65 / NEMA 4 / 4X
Product Family	CSD	CSN	CSB	CSH/CSE
Product Picture				
	Control Stations	Control Stations	Pendant Control Stations	Pendant Control Stations
Dimensions (mm)	52 x 55 x 97(131)	70 x 83 x 110	57 x 76 x 117	53x74x292 44x70x276
Characteristics	- Steel base/plastic cover - 1 or 3 buttons - Interlock, maintained opts	- Zinc die cast body - Interlock and maintained options are available	- 94V-0 plastic - Colors:red, yellow or black - Interlock & maintained opts	- 94V-0 plastic - 1-speed or 2-speed - Interlock, E-stop options
Contact Ratings	A600/P600	A600/P600	A600/P600	A600/P600
IP/NEMA Ratings	IP20 / NEMA 1	IP65 / NEMA 4	IP65 / NEMA 4 / 4X	IP65 / NEMA 4 / 4X
Product Family	CSG-22	CSC	800 700	TL-30/50/70/90
Product Picture				
	Pendant Control Stations	Pendant Control Stations	Visual Signal/Rotating Beacons	Signaling Towers
Dimensions (mm)	Various	Various	Various	30mm,50mm, 70mm, 90mm
Characteristics	- 94V-0 plastic - Up to 12 switch functions - 1-speed or 2-speed - Interlock options	- 94V-0 plastic - Up to 12 switch functions - 1-speed or 2-speed - Interlock options	- LED, Inandescent or strobe - Flashing or steady - Surface mount or pipe mount	- LED or strobe (universal voltage) - Flashing or steady - Sound module
IP/NEMA Ratings	IP65 / NEMA 4 / 4X	IP65 / NEMA 4 / 4X	IP65	IP65
Certificates	cULus CE	cULus CE	cULus CE	CE
Product Family	CB	ESWL	118-F	FSC/FSV
Product Picture				
	Alarm Bells	Emergency Lights for Elevator	Retiring CAM	Float Switches
Dimensions	4, 6, 8, 10 inches	5-1/2 x 8-1/2 inch	742x50x84mm	Various
Characteristics	- 6, 12, 24, 120, 240, 380V - Optional weather-proof backbox	- Wall surface mount - Stainless steel - LED	- 1.2A/110VDC,2.4A/60VDC - Horizontal Force: 3 lbs - Horizontal Movement: 30mm (1.2 inch)	- 10,13,15A,120/250V - IP68
Certificates	cULus CE	SP CE	CE	cULus CE

Industrial Foot Switches



Product Family	FS-1	FS-81	FS-9	FSC-31
Product Picture				
	Light Duty	Light to Medium Duty	Medium Duty	Medium to Heavy Duty
Dimensions (mm)	70 x 103.25 x 21.5	75 x 100 x 33 180 x 132 x 31 (twin)	70 x 80 x 36	89 x 142.5 x 54
Characteristics	- With nonskid pads - front or rear hinged style - Maintain style available - Stainless steel available	- Plastics or zinc cast body - Custom color available - SPDT, DPDT or 2-stage - Push-on/push-off available	- Plastics or zinc cast body - Custom color available - SPDT	- Zinc die cast body - Available in 1 or 2 pedals - SPDT, DPDT or 2-stage - Push-on/push-off available
Contact ratings	10A, 15A 250VAC	10A, 15A 250VAC	10A, 15A, 20A, 25A 250V	10A, 15A, 20A, 25A 250V
IP/NEMA Ratings	IP20 or IP68	IP20 or IP68	IP20 or IP68	IP65 or IP68

Product Family	FS-5	FS-61	FS-62	FS-41 / FSM-41
Product Picture				
	Heavy Duty	Heavy Duty	Heavy Duty	Heavy Duty
Dimensions (mm)	100 x 200 x 85 157 x 228 x 140 (guarded)	70.5 x 220 x 62 164 x 240 x 157 (guarded)	192 x 220 x 62 275 x 254 x 151 (guarded)	110 x 170 x 50 160 x 180 x 137 (guarded)
Characteristics	- Iron cast based with aluminum cast guard - SPDT, DPDT or 2-stage - maintained, anti-trip options	- Die cast aluminum body - SPDT, DPDT or 2-stage (with pressure point) - Options: maintained, anti-trip, variable speed, emergency stop, potentiometer		- Die cast aluminum or fiber-reinforced plastics - SPDT, DPDT - Anti-trip, steel guard
Contact Ratings	15A, 20A, 25A, 250VAC	15A, 20A, 25A or A600/Q300		10A, 15A, 20A, 25A , 250VAC
IP/NEMA Ratings	IP65 / NEMA 4	IP65 / NEMA 4 (or IP67/NEMA 6)		IP68 / NEMA 6, 6P

Product Family	FS-81R	FS-81-C2	FSM-91-C2	FSC-31-C3
Product Picture				
	Rocker Style	Airval Switch	Airval Switch	Airval Switch
Dimensions (mm)	25 x 29 x 20	75 x 100 x 33	70 x 80 x 36	89 x 142.5 x 54
Characteristics	- Plastics or zinc cast body - SPDT x 2	- Plastics or zinc cast body - 1/8-27NPT ports - 2-way or 3-way - Up to 150 PSI	- Plastics or zinc cast body - 1/8-27NPT ports - 2-way or 3-way - Up to 150 PSI	- Aluminium alloy body - 1/8-27NPT ports - 2-way, 3-way or 4-way - Up to 150 PSI
Contact Ratings	10A, 15A, 120/250VAC			
IP/NEMA Ratings	IP20/IP68			

Product Family	AS-1	FAS-1	FAS-91	FWC-1
Product Picture				
	Air Switches	Air Switches	Air Switches	Welder Foot switch
Dimensions (mm)	25 x 29 x 20	117 x 72 x 32	70 x 80 x 36	292x118x103
Characteristics	- SPDT, DPDT - Momentary or Maintained	- SPDT, DPDT - Momentary or Maintained	- SPDT, DPDT - Momentary or Maintained	- 1K, 5K, 10K Potentiometer - 1 or 2 15A/250V switch
Contact Ratings	15A, 20A, 120/250VAC	15A, 20A, 120/250VAC	15A, 20A, 120/250VAC	
IP/NEMA Ratings	IP20	IP20	IP20	IP68



Medical Foot Switches

Featured Products (Available in Standard Switch Outputs or USB Outputs)

One Switch Function:



FS-81-SP

FX-81*

FS-21-10W

FP-41-LS

FS-1-10W-SS

FS-91-10W

FSBM-1-10

MED110

MED170

One Switch Functions:



FS-81-SP-CS

FS-61-SP*

FS-61G-SP*

FS-81-SP-W*

Two Switch Functions:



FS-81R

FSR-21

FS-71

FS82-SP

Two Switch Functions:



FS81-SP(TWIN)

FS62-SP*

FS-82-SP-W-S*

Three Switch Functions:



FS-81-SP(3-PEDAL)

FS-23-10W*

FS-83-SP-W(P)*

Three Switch Functions:



FX-83*

FSB-3*

FSB-3S*

FS-81-SP-W-B2

FS-82-SP-M-B100M

FS-82-SP-W-S-B1*

FP-42-5-W-B1-H*

Four Switch Functions:



FS-82-SP-W-S-B2

FS-84-SP*

FS-81R-W-B2-H*

FS-81-W1-B3-H*

Five Switch Functions:

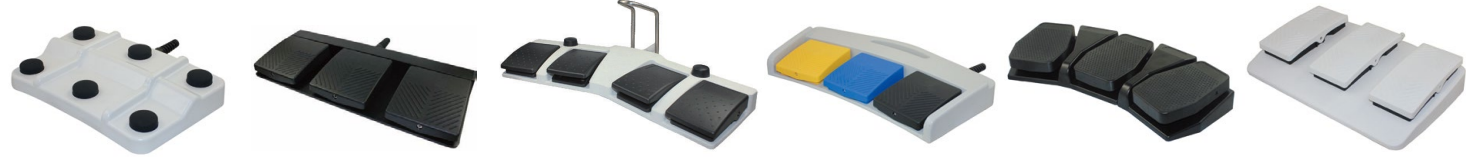


FS-72-10W-B*

FS-83-SP-W-B2*

FS-82R-10W-B*

Six Switch Functions:



FSB-66*

FS-81R(3-PEDAL)

FX-84-5T-B2-H*

FS83R-10W-W*

FS73-10W*

FSR23*

Eight Switch Functions:



FSB-68*

FS-81R(4-PEDAL)

Customized Solutions:



Surgical Microscope

Dental Control

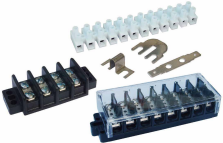
CT Scanner

Multi-function

*Also available in wireless



Proximity Sensors / Others

Product Family	SLS/SLC/SCC	SO-6	LC	TU TG TH TC
Product Picture				
	Proximity Sensors	Photoelectric Sensors	Load Cells	Terminal Blocks
Dimensions (mm)	17x17, 25x25, 30x30, 40x40 M8, M12, M18, M30	12.7 x 12.7	Aluminum, steel, stainless	Various
Characteristics	- Shielded and non-shielded - Reverse polarity protection - Short circuit protection - Red LED indicators - 10-36VDC and 20-250VAC, 10-30VDC	- Internal current limiting resistor - Direct TTL interface - Buffer logic - Fast response time - Dust protective housing	- High accuracy, reliable - Various style for different applications - Offer custom solutions	- Available 1 to 22 position - Current capacity: 15 to 150A
Contact Ratings	100mA, 150mA, 200mA, 350mA			
IP/NEMA Ratings	IP67	IP67	IP65, IP67	
Certificates				



North & South America

▶ USA	SUNS International LLC	127 Riverneck Road, Chelmsford, MA 01824, tel. +1-978-349-2329, fax +1-978-349-2330 Email: info@suns-usa.com http://www.suns-usa.com
-------	------------------------	--

Asia Pacific / China

▶ China/Shanghai	SUNS Industrial Switch (Shanghai) Co.	Unit I, 11F, West Building 668 Beijing East Road Huangpu District, Shanghai, China, 200001, tel. +86-21-53082745 fax +86-21-53082746
▶ China/Zhangzhou	SUNS Electric (Zhangzhou) Co. Ltd.	No. 169 Wengjiao Road, Zhangzhou Taiwanese Investment Zone, Fujian Province, China, tel. +86-596-6078266 fax +86-596-6078266

Europe

▶ Germany	SUNS/EFA GmbH	Mollwitzstrasse 2, D-14059, Berlin, Tel. +49 30 3011187-0 Fax +49 30 3011187-77
▶ France	SUNS/EFA France GmbH	Z.A. La Haute Limougiere, 3, rue Claude Chappe, F-37230 Fondettes. Tel. +33 247617850 Fax +33 247617851
▶ Greece	SUNS/TOP Electronic Components S.A.	66 Alkminis & Aristovoulou Str. K. Petralona, 118 53, Athens, Ph: +30 210 3428690 Fax No.: +30 210 342869
▶ Poland	SUNS/Indual Sp.z o.o.	Centrala firmy 26-220 Staporkow ul. Staszica 5 tel:+48 41 374 02 67 fax: +48 41 374 02 66