

## SURGE PROTECTION DEVICES



### RCHW Series



- Hardwired Surge Protection Device with low clamping voltage and high energy handling capabilities
- Available for all standard electrical service voltages and phase configurations
- 100kA RMS Symmetrical Amps
- Maximum Surge Current - 50kA to 200kA per phase
- Safety Standards - ANSI/UL 1449 3rd Edition Listed, Type 1 or 2
- $I_n$  - 20 kA (nominal discharge current)

### MAP Series



- Universal Surge Protection Device offers application flexibility and incorporates smart sensing technology
- Available for all standard electrical service voltages and phase configurations
- 100kA RMS Symmetrical Amps
- Maximum Surge Current - 50kA per phase
- Safety Standards - ANSI/UL 1449 3rd Edition Listed, Type 1 or 2
- Max Load Current - up to 800 Amps Continuous
- $I_n$  - 20 kA (nominal discharge current)

### TST Series



- Available for 24 - 250 Volt Service Voltage
- 100kA RMS Symmetrical Amps
- Maximum Surge Current - 10kA to 40kA per phase
- Safety Standards - ANSI/UL 1449 3rd Edition Listed, Type 4
- LED Diagnostics and Din Rail Mountable
- $I_n$  - 3 kA (nominal discharge current)

Additional Products and Complete Specifications can be found on our website.

[www.metertrater.com](http://www.metertrater.com)

# TORK®

A DIVISION OF **NSI**

## ELECTROMECHANICAL TIME SWITCHES



### 1100 SERIES: 24-HOUR TIME SWITCHES SAME ON-OFF TIMES EACH DAY

Accommodates up to 12 pairs of ON-OFF trippers. Minimum ON setting just 20 minutes — minimum OFF setting 75 minutes. Dial markings and instructions are in English, French & Spanish.

Switch	120 Volts Model #	208-277 Volts Model #	347 Volts Model #
SPST	1101	1102	1101-7
DPST	1103	1104	

#### APPLICATIONS

Automatic ON-OFF control when operation is required at the same time every day, 7 days a week.

- Lighting
- Pumps
- Signs
- Air Conditioning
- Water Heating
- Fans

### 7000 SERIES: 24-HOUR TIME SWITCHES WITH SKIP-A-DAY RESERVE POWER OPTIONAL



Switch	120 Volts Model #	208-277 Volts Model #
SPST	7100	7102
DPST	7200*	7202*
3PST	7300*	7302*
SPDT	7120*	7122
DPDT	7220	7222

For 16 Hour Reserve Power Timing mechanism add suffix L to above model numbers. (Not available for models 7100, 7102, 7122)

\*For astronomic function add suffix Z to model number.

#### APPLICATIONS

Automatic ON-OFF control when operation is required at the same time every day, with optional versatility of one to six days omission.

- Lighting
- Pumps
- Signs
- Air Conditioning
- Heating

FOR MORE INFO, CALL YOUR CES SPECIALIST

# TORK®

## DIGITAL CONTROLS



### EWZ SERIES

#### OUTDOOR LIGHTING CONTROLLER WITH SENSOR INPUT

7 DAY SCHEDULING, ASTONOMIC OPTION MULTI-VOLTAGE INPUT 120-277 VAC  
PATENTED 40 AMP CONTACTS.

Capable of different schedules each day of the week ON & OFF SET POINTS: 20 per day or week, minimum setting is one minute.

#### SUPERCAPCITOR BACKUP & PERMANENT SCHEDULE RETENTION

Model #	Clock Input 50/60Hz
EWZ101	120-277VAC
EWZ120	120-277VAC
EWZ201	120-277VAC

#### APPLICATIONS

- Outdoor Signs
- Security Lighting
- Canopy Lighting
- Parking Lot Lighting

**PATENTED  
40 AMP  
CONTACTS**



## TIME SWITCHES

Engineered & Manufactured to the highest industry standards since 1922.

**TORK**

**TORK®**A DIVISION OF **NSi**

DIGITAL CONTROLS

**DZS SERIES**

**MULTIPURPOSE CONTROLS 1, 2 OR 4 CHANNEL**  
 365 Day ADVANCE SINGLE HOLIDAY AND SEASONAL  
 SCHEDULING WITH ASTRONOMIC FEATURE

Capable of different schedules each day of the week  
 ON/OFF set points: 99 per week, minimum is one  
 minute. Astronomic Offset: 299 minutes.

Model #	Voltage
DZS100BP	120/(208-240)/277
DZS200BP	120/(208-240)/277
DZS400BP	120/(208-240)/277
MMP	120

**APPLICATIONS**

- HVAC Equipment
- Horns, Bells
- Interior Lighting
- Electric Motors
- Outdoor Lighting and Signs
- Refrigeration Defrost Control: Condensers, Heaters

**MEMORY MODULE  
 PROGRAMMER  
 (MMP) OPTIONAL**

**MM**

**MEMORY MODULE** can be programmed at any one  
 location and inserted into another DZS series unit with MM  
 socket in any other location!

**COPY FEATURE:** Unit can be configured to  
 copy program schedule to multiple memory modules!

**(OPTIONAL) Windows-based program and  
 MEMORY MODULE PROGRAMMER** can be used  
 to program the memory module.

optional  
**MMP**

## DIGITAL CONTROLS



### DGLC SERIES OUTDOOR LIGHTING CONTROLLER WITH SENSOR INPUT



PHOTOSENSOR MODEL EPC1  
IS SUPPLIED WITH EACH UNIT

**Model #** Clock Input 50/60Hz

DGLC 120VAC

DGLC-3 277VAC

#### APPLICATIONS

Offers combination light level and time-of-day for 1 circuit and photocontrol operation for a 2nd circuit.

Use Circuit #1 for outdoor signs or displays where dusk-ON and preset time OFF is desired, perhaps on certain days. Use Circuit #2 for all night safety or security lighting where dusk-ON, daylight-OFF is desired everyday.

Circuit #1: Photocontrol ON/Time OFF

Time ON/Photocontrol OFF

Circuit #2: Photocontrol ON/Photocontrol OFF

NOTE: Display shows the scheduled status of the load which is connected to circuit #1. Circuit #2 load will turn ON at sunset and OFF at sunrise every day of the week.

## RESIDENTIAL TIMERS



### IN-WALL INTERVAL TIMERS

#### SPRING WOUND

Installs as easily as a wall switch. Fits decorator wallplate or standard switchplate. Ideal for multi-gang installations.

Input: 120VAC, 50/60 Hz



Type Cycle	Model # with Hold	Model # without Hold	Type Cycle	Model # with Hold	Model # without Hold
5 Mins	N/A	A505M	0-2 Hrs	N/A	A502H
0-15 Mins	A515MH	A515M	0-4 Hrs	N/A	A504H
0-30 Mins	A530MH	A530M	0-6 Hrs	A506HH	A506H
0-60 Mins	A560MH	A560M	0-12 Hrs	A512HH	A512H

Available in: Ivory (no suffix); White (add suffix W)

### COMMERCIAL/INDUSTRIAL METAL WALLPLATE INCLUDED

Type Cycle	Model # with Hold	Model # without Hold	Type Cycle	Model # with Hold	Model # without Hold
5 Mins	N/A	C505M	0-2 Hrs	N/A	C502H
0-15 Mins	C515MH	C515M	0-4 Hrs	N/A	C504H
0-30 Mins	C530MH	C530M	0-6 Hrs	C506HH	C506H
0-60 Mins	C560MH	C560M	0-12 Hrs	C512HH	C512H

**ELECTRICAL ACCESSORIES****PORCELAIN KEYLESS**

Standard or Pull Chain

3/16" Dia. # Mounting

BERGEN CAT#	SIZE	UNIT CTN	CASE QTY	WT/CASE
BK212-D	Medium Base	1	50	35
BK858-SO	Medium Base	1	50	36

**GREEN PIGTAIL**

W/ SLOTTED HEX GROUND SCREW

BERGEN CAT#	SIZE	UNIT CTN	CASE QTY	WT/CASE
B49	7 1/2" 12AWG	100	100	24
B50	7 1/2" 14AWG	100	100	23

**GREEN GROUND SCREW**

BERGEN CAT#	SIZE	CASE QTY	WT/CASE
B48	10/32 x 3/8"	100	1

**GREEN GROUND CLIP**

BERGEN CAT#	FITS	CASE QTY	WT/CASE
B0C99	#14 & #12	100	1

**S HOOKS**

ZINC PLATED

BERGEN CAT#	SIZE	DVTY	CASE QTY	WT/CASE
B300	14 AWG	LIGHT	100	2
B300A	12 AWG	MEDIUM	100	2
B300B	10 AWG	HEAVY	100	3

**JACK CHAIN**

STEEL

BERGEN CAT#	SIZE	UNIT CTN	CASE QTY	WT/CASE
B297	14 AWG LIGHT HANKS	100 FT.	10	50
B298	12 AWG STANDARD HANKS	50 FT.	10	30
B298S	12 AWG STANDARD SPOCK S	100 FT.	8	48
B299	12 AWG STANDARD SPOCK S	250 FT.	4	60
B299B	10 AWG HEAVY HANKS	100 FT.	1	18

**ECONOMY HI-BAY WRAP**

T5  
4, 6 & 8  
LAMP

Need lots of light but on a tight budget?  
The Hi-Bay T5 Lighter designed especially for 4 light  
T5 is the right use.



**BERGEN**  
INDUSTRIES

[www.bergeninc.com](http://www.bergeninc.com)

FOR MORE INFO, CALL YOUR CES SPECIALIST

**LIGHTING PRODUCTS**

FLOOD LIGHT	
PART NUMBER	DESCRIPTION
BFL32M100QL	100W MH QUAD (small)
BFL45M175QL	175W MH QUAD (medium)
BFL61M150QL	150W MH QUAD (round back)
BFL61M175QL	175W MH QUAD (round back)
BFL65M250QLSY	250W MH QUAD (small yoke)
BFL65M400QLSY	400W MH QUAD (small yoke)
BFL90FM175QLBR	175W MH QUAD (12" area flood)
BFL79FM400QLSF	400W MH QUAD (16" area flood)
BFL90M1000QLSF	1000W MH QUAD (23" area flood)
BFLPTF	Post Top Filter
BMV	Mounting Yoke



WALL PACKS	
PART NUMBER	DESCRIPTION
BWP12H70R120L	70W HPS 120V (small)
BWP12M100QL	100W MH QUAD (small)
BWP13H70R120L	70W HPS 120V (mini)
BWP15M175QL	175W MH QUAD (medium)
BWP20M250QL	250W MH QUAD (large)
BWP25M400QL	400W MH QUAD (large deep)
BWH15M175QL	175W MH QUAD (hooded semi cutoff)
BWH20M250QL	250W MH QUAD (hooded semi cutoff)
BWH25M400QL	400W MH QUAD (hooded semi cutoff)
BWFK15M175QL	175W MH QUAD (accord semi cutoff)
BWFK25M400QL	400W MH QUAD (accord semi cutoff)



VANDAL RESISTANT	
PART NUMBER	DESCRIPTION
BVN30H70QL	70W HPS QUAD
BVN30M70QL	70W MH QUAD
BVN41H100QL	100W HPS QUAD
BVN41M100QL	100W MH QUAD
BVN41M150QL	150W MH QUAD
BVN41M175QL	175W MH QUAD



SLIMLINE & ACCLAIM	
PART NUMBER	DESCRIPTION
BWPS40M150QMGL	150W MH QUAD (slimline)
BWPS40M250QMGL	250W MH QUAD (slimline)
BWPS40M400QMGL	400W MH QUAD (slimline)
BWPR40H-CMT0QL	70W MH QUAD (half-cutoff frame)
BWPR40G-PM70QL	70W MH QUAD (round-grid frame)
BWPR40G-OM70QL	70W MH QUAD (round-open frame)



HIGHBAY	
PART NUMBER	DESCRIPTION
BK400MHP	400W MH QUAD (open rated temp)
RK250MHP	250W MH QUAD (open rated temp)
CFL442	6 x 40W CFL
CFL442	4 x 40W CFL
RKAR16	16" Aluminum Reflector



WALL PACK ACCESSORIES	
PART NUMBER	DESCRIPTION
BWPMP	DIE CAST MOUNTING PLATE
BWPFC	"DARK SKY" FULL CUTOFF
BWPQS	GLARE SHIELD
BWPWG	WIRE GUARD
BWPLG	LAMP GUARD

- Dark Sky

- Full Cut Off

- Energy Efficient Die - Cast CFL's

- HID


**BERGEN**  
INDUSTRIES

[www.bergeninc.com](http://www.bergeninc.com)
**MANY OTHER ITEMS AVAILABLE AT CES**

## ET70115C Series - Electronic 365 Day Single Channel Time Switch

The Next Generation ET70000C series is designed to provide 20 amp weekly or yearly single load control. Over 1,000 set points are available for fixed scheduling as well as astronomic switching for outdoor lighting and pulse switching for bell ringing. A lifetime memory backup protects all program data for the life of the time switch.



**Applications**  
 Outdoor Astronomic Lighting  
 Indoor Lighting  
 HVAC  
 Urinal flushing  
 School flashers  
 Security Systems  
 Bell Ringing  
 Monthly Generator Exercising

## ET70215C Series - Electronic 365 Day Two Channel Time Switch

The Next Generation ET70000C series is designed to provide 20 amp weekly or yearly load control for 2 independent loads. Over 1,000 set points are available for fixed scheduling as well as astronomic switching for outdoor lighting and pulse switching for bell ringing. A lifetime memory backup protects all program data for the life of the time switch.



**Applications**  
 Outdoor Astronomic Lighting  
 Indoor Lighting  
 HVAC  
 Urinal Flushing  
 School flashers  
 Security Systems  
 Bell Ringing  
 Monthly Generator Exercising

## FF/FD Series - Spring Wound Timers

The FF and FD series turns circuits off at the end of a selected time period. They are available with either a brushed aluminum wall plate, an ivory or a white time dial. The ivory or white time dial styles can be used with any standard single or multi-gang toggle or decorator switch plate. Both series utilize the same heavy duty switching mechanism.



**Applications**  
 Lighting  
 HVAC  
 Fans  
 Heaters  
 Pumps  
 Process Controls  
 Override Switching

## K/LC Series - Photo Controls

These photo controls provide photo initiated control for dusk-to-dawn lighting. These thermal type photo controls provide an inherent built-in delay of approximately 15 seconds to minimize nuisance switching.



**Applications**  
 Outdoor Lighting  
 Billboards  
 Security Lighting  
 Landscape Lighting  
 Area Lighting

## T100 Series - Heavy Duty 24 Hour Time Switches

Twenty four hour dial provides up to 10 ON/10 OFF operations daily and minimum ON/OFF operation of 1 hour. Includes manual override and lockable steel enclosure.



**Applications**  
Indoor/Outdoor Lighting  
HVAC  
Pumps/Blowers  
Signs Filters  
Fans Pools

## T170 Series - Heavy Duty 24 Hour Time Switches with Skipper

Twenty four hour dial with Skipper provides up to 10 ON/10 OFF operations daily and minimum ON/OFF operation of 1 hour. Includes manual override and lockable steel enclosure. Skipper allows load activity to be skipped on selected days.



**Applications**  
Indoor/Outdoor Lighting  
HVAC  
Pumps/Blowers  
Signs  
Fans  
Filters  
Pools

## WP1000 Series - Weatherproof Receptacle Covers

These covers provide protection for receptacles in outdoor or other high moisture environments with the cord set plugged in. These "while in use" covers are available in clear, white, gray or heavy duty die cast metal designs. Inserts are included to provide for either duplex or GFCI type receptacle coverage.



**Applications**  
Low Voltage Lighting  
Bug Zappers  
Pools / Spas  
Soda Machines  
Portable Signs

## ET8000 Series - Electronic 7-Day Astronomic Time Switches

Intermatic's Electronic Astronomic 7-Day Time Switch automatically switches loads according to a preset weekly schedule with to-the-minute accuracy. The astronomic feature provides sunset ON and sunrise OFF settings to eliminate the need for separate control devices. Astronomic programming can be combined with independent programs to provide a sunset ON and timed OFF program



**Applications**  
Indoor/Outdoor Lighting  
HVAC  
Pumps/Blowers  
Signs  
Fans  
Filters

## Swimming Pool Time Switches

These Time Switches provide coordinated control for heater and filter pump operations. This 2 circuit switch is designed to turn off a gas fired swimming pool heater approximately 20 minutes before the filter pump is turned off.



**Application**  
Swimming Pools and/or Spas  
with Gas Fired Heaters

## 100 Amp Swimming Pool Control Centers

The T30000R Series Control Centers reduce installation costs and provide all of the electrical requirements for any pool installation. They offer an all-in-one electrical control center which can be custom wired for a wide variety of requirements.



**Applications**  
Filter Pumps, Lights  
Heating Systems  
Cleaning Systems  
Fountains, Security Systems  
Valve Actuators  
Landscaping Lights  
Booster Pumps, Yard Lights  
Sprinkler Systems

## Freeze Protection Controls

These Freeze Protection Controls are designed to protect the pool and spa equipment and plumbing against freeze damage. They turn ON the pump and the heater when the outdoor temperature drops below the temperature set by the user adjustable thermostat.



**Applications**  
Filter Pumps  
Water Falls  
Water Features

## Pool and Spa Transformers

These Safety Transformers are specifically designed to supply 12 volts to pool/spa lights, submersible fixtures and outdoor garden lights. A grounded shield between the primary and secondary windings assures safe operation and the built-in circuit protection will disconnect power to the transformer in case of defect or overload.



**Applications**  
Pool Lights  
Spa Lights  
Garden lights

## Portable Outdoor Timers

These Portable Outdoor Timers are specially designed to control the filter pump of a portable pool or spa but they can also be used to turn ON and OFF (in off-season) outdoor decoration and other appliances indoors or outdoors.



**Applications**  
Filter Pumps  
Lights  
Engine Block Heaters  
Air Conditioners  
Signs  
Fans

**FOR MORE INFO, CALL YOUR CES SPECIALIST**

## Residential/Commercial Surge Protection Devices

The Residential/Commercial group of hardwired surge protection devices is designed to provide a wide range of protection choices for 120/240 volt AC single or split phase installations.



**IG1240RC**

**Applications**  
Residential  
Home Office  
School Portables  
and Classrooms



**IG1300-2T-1C**



**IG1300-4T-2C**

**IG1300-2T-1C Applications**  
Provides AC,  
2 Telephone  
and 1 Coax Line  
Protection

**IG1300-4T-2C Applications**  
Provides AC,  
4 Telephone  
and 2 Coax Line  
Protection

## Secondary Surge Arresters

These models are MOV (Metal Oxide Varistor) based hardwired Secondary Surge Arresters more commonly known as Lightning Arresters. These units are designed to protect electrical equipment from the damaging effects of spikes and transient surges caused by lightning



**Applications**  
Outdoor Lighting  
Billboards  
Security Lighting  
Landscape Lighting  
Irrigation Controls  
Pumps & Motor Controls  
Farm Equipment

Model	Service Voltage	Poles	Number of Leads/Length	Wire Configuration	Actual Clamping Voltage (Line to Ground)		
					1500A	5000A	10000A
AG2401C	120/240V	1 or 2	3/18"	L1, L2, GND/N	490	980	1410
AG2401C-IND	120/240V	1 or 2	3/18"	L1, L2, GND/N	490	980	1410
AG2083C	208V	3	4/18"	L1, L2, L3 GND/N	490	980	1410
AG2403C	240V	3	4/18"	L1, L2, L3 GND/N	740	1330	1850
AG4801	277V or 480V	1 or 2	3/18"	L1, L2, GND	1450	2130	2620
AG4803C	480V	3	4/18"	L1, L2, L3 GND/N	1450	2130	2620
AG6503C	Up to 600V	3	4/18"	L1, L2, L3 GND/N	1640	2340	2920
AG6503C-IND	Up to 600V	3	4/18"	L1, L2, L3 GND/N	1640	2340	2920
AG6503L	Up to 600V	3	4/36"	L1, L2, L3 GND/N	1640	2340	2920

**MANY OTHER ITEMS AVAILABLE AT CES**

## Programmable Controller / Industrial Computer Protector

The PanelGuard F20 Series is a hardwired computer grade Surge Protection Device that unites MOV's, inductors and capacitors in a multi-level hybrid circuit that provides outstanding protection. The F20 series is designed to protect against high voltage, high energy transients in addition to the cumulative effects of the more frequently occurring low energy transients.



### Applications

Diagnostic Imaging Equipment  
Programmable Controllers  
HVAC Automation and Control  
Microprocessor Controls  
Pump Power Circuits  
Bulk Feed Controllers  
Automatic Teller Stations  
Fire & Security Power Supplies

Model	Voltage	Amperage
IG1201F20	120 VAC Single Phase	<20 Amps.
IG2401F20	240 VAC Single Phase	<20 Amps.

## Plug-In Strip Surge Protection Devices

A wide selection of surge protection strips to match your application requirements. Full or superior protection circuits and EMI/RFI "noise" reduction to protect sensitive electronic equipment.  
All models are UL 1449 listed.



6 Outlet Metal Strip  
IG11266

## Stand Alone Phone and Coax Cable Protection

### Phone/DSL/Modem Protection

#### 1G4TM

- Protection for up to 4 phone lines
- NEMA1 surface mount enclosure

#### 1G2TM

- Protection for up to 2 phone lines
- NEMA1 surface mount enclosure

### Cable/Satellite/Internet protection

#### 1G1CM

- Protection for 1 coax cable line



Model	Application	Lines Protected	Application
IG4TM	Phone/modem/DSL	4	Indoor (NEMA1)
IG2TM	Phone/modem/DSL	2	Indoor (NEMA1)
IG1CM	Cable TV / Internet / Satellite	1	Indoor (NEMA1)