

The Tucson Compact Inverter is a single phase, off-line, inverter system. Each system will consist of a solid-state inverter, a fully automatic temperature compensated dual mode battery charger, a continuous duty static switch, an internal maintenance bypass switch and a LED monitoring status display panel. Pulse width modulated (PWM) output design provides clean, 60Hz sinusoidal emergency power to loads. The Tucson Compact Inverter is designed to function in conjunction with the existing building electrical system to provide back-up power protection and distribution for lighting loads and other critical loads.

Model: _____ Date: _____
 Accessories: _____
 Job Name: _____ Type: _____

- Capacity: 55W/125VA, 110W/125VA, 110W/250VA, or 220W/250VA
- Input Voltage: 120 or 277 VAC
- Input Voltage Range: +/- 10%
- Input Frequency Range: 60 Hz, +/- 2%
- Output Voltage: 120 or 277 VAC
- Output Voltage Regulation: +/- 5% in battery discharge mode 0-100% linear load
- Output Frequency Range: 60 Hz, +/- 3% during emergency cycle
- Output Distortion: Less than 3% THD (linear load)
- Input Protection: Input line fuses
- Output Protection: Output line and inverter fuses
- Battery: Sealed lead calcium
- Recharge Current: Conforms to UL 924 standards
- Efficiency: Offline inverter with on-line efficiency of 98% at 100% linear load
- Compliance: Meets NFPA Life Safety Code 101, OSHA, NEC, state and local codes. UL 924 Listed. Optional T-Grid models are Plenum Rated to UL 2043 and meets City of Chicago CCEA requirements. Buy American Act (BAA), Optional CEC (Title 20) Compliant.
- Operating Temperature: 20°C - 30°C (68°F - 86°F)
- Altitude: <10,000 feet (3,000m) above sea level
- Humidity: 95%, Non-condensing
- Monitoring: LED monitoring display panel providing system operational information
- Transfer Time: Less than one (1) second
- Mounting: Surface mount (standard) also available in recessed or T-Grid mounting



WARRANTY

Any component that fails due to a manufacturing defect is guaranteed for one year with a separate three year prorated warranty on the battery. The warranty does not cover physical damage, abuse or instances of uncontrollable natural forces. See the full Exitronix warranty document for detailed information. (Terms and Conditions apply)

ORDERING INFORMATION Example: TUCC-110/125-R

Series	Model (Capacity) ¹	Options	Accessories ⁴
TUCC	55/125 = 55 Watts/125VA	4C ² = Four Output Circuit Switching	RTS = Remote Test Switch
	110/125 = 110 Watts/125VA	AO ² = Two Circuit, Adjustable Output	
	110/250 = 110 Watts/250VA	CC = Custom Housing Color	
	220/250 = 220 Watts/250VA	CEC = Title 20 Compliant	
Notes		G2 = Self-test/Self-diagnostics	
	¹ Input voltage must be the same as output voltage	R ³ = Recessed Mounting	
	² 4C and AO options are not available together	T ³ = Plenum Rated Ceiling T-Grid Mounting	
	² Available with TUCC-55/125 and TUCC-110/125 only, mounting cannot be combined		
	³ Order as a separate line item		

Series	Model (Watts/VA)	Number of Batteries	Battery Voltage (VDC)	Battery Current (Amps)	AC Input Current		Thermal Output (BTU)		Weight (lbs) Includes Batteries
					120VAC (Max)	277VAC (Max)	On-Line	Emergency	
Tucson Compact Inverter	55/125	2	24	3.4	1.2	0.52	9	90	32
	110/125	2	24	5.7	1.2	0.52	9	95	38
	110/250	4	48	3.3	2.4	1.1	18	163	47
	220/250	4	48	5.6	2.4	1.1	18	167	60

INPUT

120 or 277VAC input

AC Input Characteristics:

- Input Frequency: 60 Hz
- Power walk-in: 0-100% over a 10-second period
- Magnetizing Inrush Current: Less than nominal input current for less than one (1) cycle
- Input Surge Protection: The Tucson Compact Inverter is equipped with standard AC line fuses
- Will accommodate up to 12AWG wire

OUTPUT

120 or 277VAC, Stand-by design is ≥99% efficient at 100% linear load

AC Output Characteristics:

- Voltage Regulation: +/- 5% during battery discharge. 0-100% linear load
- Frequency: 60 Hz (+/- 0.3Hz during emergency cycle)
- Voltage Distortion: Less than 3% total THD at 100% linear loads
- True sine wave output for more load compatibility
- Soft start design reduces fixture inrush current
- Will accommodate up to 12AWG wire
- Output protection: Short circuit and overload protection, line and inverter fuses

BATTERIES

The Tucson Compact Inverter employs sealed lead calcium heavy-duty industrial battery system with 24VDC, designed for auxiliary power service.

- Battery Protection: Low voltage battery disconnect protects the battery from being severely damaged by deep discharges during prolonged power failures. The Tucson Compact Inverter is equipped with a DC input breaker to protect against DC overload and short circuit. Reverse battery protection included
- Runtime: 90 minutes standard based on battery performance at 77°F (25°C)
- Sealed, maintenance-free, lead calcium (AGM) batteries

CHARGER

Consists of a fully automatic, temperature compensated, dual mode charger with a power consumption of 15W maximum (2.5W in standby) for TUCC-55/125 and TUCC-110/250 models and 30W maximum (2.5W in standby) for TUCC-110/250 and TUCC-220-250 model. (Charger only)

- Battery Circuit Breaker also used as battery isolator
- Safety Circuitry: AC lockout prevents battery discharge prior to initial unit power up. Brownout Protection automatically switches the unit to emergency mode when utility voltage is significantly reduced

LAMPS AND LOADS

- Pure sine wave output for all types of lamps
- Emergency power provides FULL LIGHT OUTPUT from all lamps and fixtures for the entire runtime
- Ideal for powering incandescent fluorescent, induction and LED fixtures
- Compatible with LED drivers, fluorescent and induction ballasts
- Compatible with dimming ballasts
- Emergency fixtures can be on, off, be on a switch or timer
- Supports unswitched loads or one (1) switched load
 - Up to four (4) individually switched loads with 4C option
- Supports two circuit, adjustable output / dimmer bypass
 - Provides adjusted power output to dimmable LED Lighting Loads with AO option

CODES

- The Tucson Compact Inverter meets the requirements of the following standards:
 - UL 924 Standards for Lighting Inverter Equipment
 - NFPS 101 Life Safety Code
 - NEC - NFPA 70 National Electrical code
 - OSHA - Occupational Safety & Health Administration

PROTECTION

- A solid state low voltage disconnect circuit is used to protect the battery from being severely damaged by a deep discharge
- Transfer in less than one (1) second

DIAGNOSTICS, MAINTENANCE AND ACCESSIBILITY

The Tucson Compact Inverter design provides a monitoring panel on the front of the unit to show operating status at all times. The panel provides a test switch for users to initiate system tests and 3-LED array indicating system status. Lights show status for AC-On, Charge-On and Inverter-On.

CABINET

- Space saving small footprint with several mounting options available
- Enclosure: The Tucson Compact Inverter is constructed with heavy duty steel with a white powder coated finish providing scratch and corrosion resistance. Optional special color paint (option CC) finishes are available upon request, please consult factory for details
- The Tucson Compact Inverter is available with several different mountings for ease of installation:
 - Surface mount (Standard): Designed for mounting to wall by means of keyhole slots provided in the back of the unit housing
 - Recess mount (option RM): Provides recess mounting holes on both sides of the enclosure (available for TUCC-55/125 & TUCC-110/125 only)
 - T-Grid Mount (option T): Housing design allows a simple drop-in installation between T-Grid runs. Safety wires (supplied by other) are required for attachment to building structure (available for TUCC-55/125 & TUCC-110-125 only)

INSTALLATION

- Small footprint and different mounting options allow easy installation in several convenient locations
- Units may be installed up to 1,000 feet maximum from controlled fixture(s)/ devices
- Provisions for local switching capability (switches to ON position during emergency conditions regardless of local switch position)
- I/O connectors will accommodate up to 12AWG wire
- The Tucson Compact Inverter shall operate under the following environmental conditions:
 - Operation Temperatures from 20°C - 30°C (68°F - 86°F) for optimum system performance. Temperatures outside this range will affect battery performance and life
 - Relative humidity (operating and storage): 95% non-condensing
 - Barometric Pressure of up to 10,000 feet above sea level without derating

DELIVERY, STORAGE, AND HANDLING

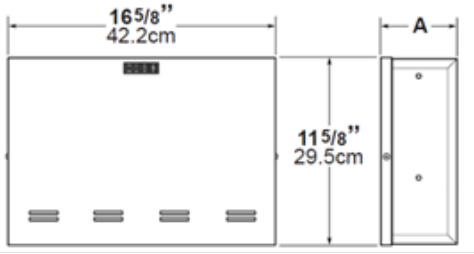
- All products shall be packaged in a manner to prevent penetration by debris and to allow safe delivery by all modes of ground transportation and air transportation where specified
- Prior to shipping all products shall be inspected at the factory for damage
- Equipment shall be protected against extreme temperature and humidity and shall be stored in a conditioned or protected environment
- Equipment containing batteries shall not be stored for a period exceeding three (3) months without powering up the equipment for a period of eight (8) hours to recharge the batteries

WARRANTY

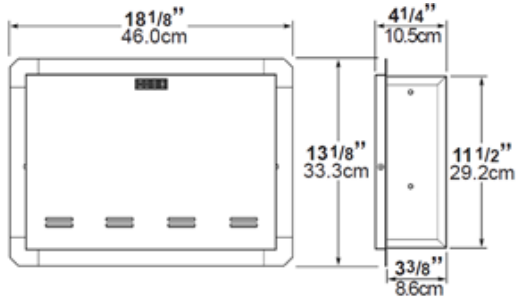
- One (1) year full warranty against defects in materials and workmanship (excluding lamps)
- Battery warranty three (3) year pro-rated

DIMENSIONS

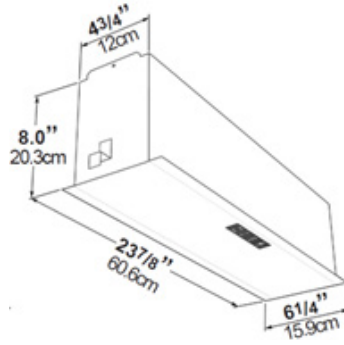
Standard Mounting (Surface)



Optional Recessed Mounting (Option: R)



Optional Ceiling T-Grid Mounting (Option: T)



Models	Depth Dimension "A"
TUCC-55/125, TUCC-110/125	4.25" (10.8cm)
TUCC-110/250, TUCC-220/250	6.25" (15.9cm)