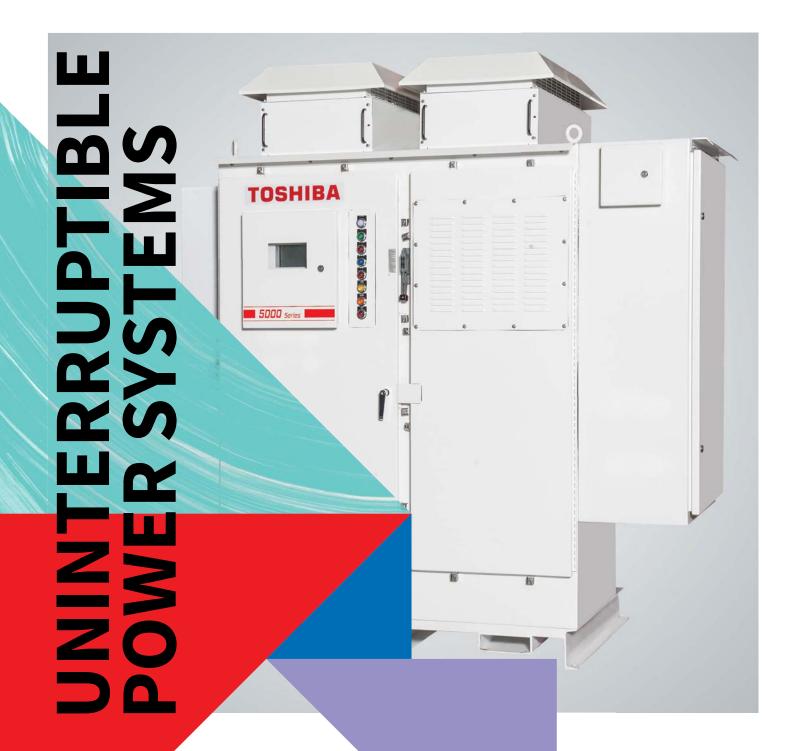


### **POWER ELECTRONICS**

## **5000 SERIES N3R**

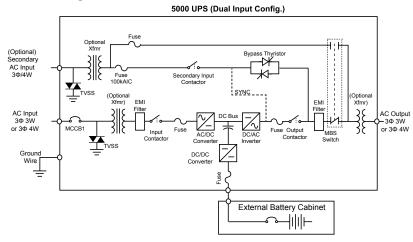


# NEMA® 3R END-TO-END SOLUTIONS

The Toshiba 5000 Series Industrial three-phase uninterruptible power system (UPS) is built for the rigors of industrial applications. The unit is weatherproofed to NEMA 3R, making it resistant to environmental contaminants, and suitable installation in both indoor and outdoor settings. The doubleconversion, all insulated-gate bipolar transistor (IGBT) 5000 Series UPS features a digitally controlled IGBT input rectifier, an intelligent low harmonic pulse-width modulation (PWM) output, state-of-the-art electronic battery isolation circuitry, and an easy to navigate local touchscreen interface.



#### 5000 Series N3R One Line Diagram



#### **OPTIONS & ACCESSORIES**

#### **BATTERY SYSTEMS OPTIONS**

The Toshiba 5000 Series N3R UPS offers a wide selection of compatible batteries including VRLA, wet cells, Nickel-Cadmium or Lithium-ion batteries along with the option of putting these batteries in a fully rated outdoor cabinet.

#### **END-TO-END SOLUTIONS**

Toshiba offers a full array of solutions including input and output isolation transformers, PDUs, bypasses, external chargers, and distribution panels.

#### **UPS MONITORING**

RemotEye® 4 offers real-time control, monitoring, and analysis of UPS operation. RemotEye® 4 also features a first-ever mobile website for monitoring UPS status updates on-the-go. Universal communications protocols compatible with RemotEye® 4 include Modbus® TCP & RTU, BACnet® IP & MSTP, HTTP/HTTPS, and SNMP. RemotEye® 4 is compatible with IPv6. The 5000 Series also includes a Human Machine Interface (HMI) with PLC I/O ports to allow customer specific hard wire communication.

#### **EASY TO TROUBLESHOOT**

Wave Capture® is a built-in feature that aids in troubleshooting by capturing and storing voltage and current waveforms at input, output, DC bus, and DC battery link along with a time stamp.

#### **N3R STANDARD FEATURES**

- 14°F to 122°F (-10°C to 50°C) Operational Range
- Waterproof enclosure, able to withstand up to 95% non-condensing humidity
- Hurricane proof: Able to withstand winds of up to 160mph
- Seismic and ABS rated
- Double conversion online UPS with IGBTs
- 65 kAIC-Rated
- Fuseless TVSS on all inputs
- Built-in Rotary Maintenance Bypass
- Wave Capture Troubleshooting tool
- Mesh wire filters
- Programmable I/O Ports
- LED Operation Status Indicators
- Keyed Doors with Mechanical Interlock
- EPO switch
- Bottom cable entry
- Industrial-rated components designed for a 20 year life span
- Toshiba RemotEye 4 Multi-Protocol UPS Monitoring Solution



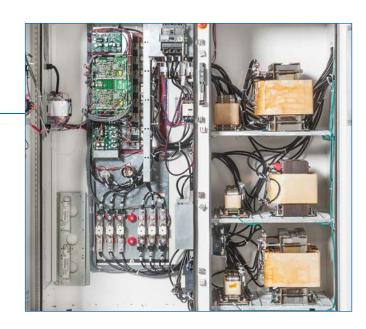
Customization is available through a number of options:

- Dual Input
- Copper-wound Galvanic isolation transformers for multiple input/output voltages
- External/Remote/Wrap-around bypass with mechanical keyed interlock or SKRU
- Conformal Coated boards
- Installation, Operation and Repair Spare Part Kits
- Isolation Transformers on Alternate input
- · Lithium-ion Battery offering
- 600/240/120 V Output Transformer



#### **TOSHIBA ADVANTAGE**

- Proudly Manufactured in Houston, Texas
- Maximum 4 week lead times for standard products and components in North America
- 20 year service life







#### **N3R SPECIFICATIONS**

MODEL					
Model Number*	5CP0G015KWXX, 5CP0G020KWXX	5CP0G025KWXX, 5CP0G030KWXX	5CP0G015KCXC, 5CP0G020KCXC	5CP0G025KCXC, 5CP0G030KCX	
Capacity	15/20 kVA	25/30 kVA	15/20 kVA	25/30 kVA	
Topology		True On-Line, Double-Conversion, All-IGBT Technology			
INPUT					
Voltage (Standard)		480 V: Three-Phase, Three-Wire + Ground, with Isolation Transformer**		208/120V: Three-Phase, Four-Wire + Ground Single Input, Transformerless	
Voltage Range		-15% to +10% (Without Using Battery)			
Power Factor		>0.98			
Current THD		<3% at 100% Load			
Frequency		50 +/- Hz; 60 +/- Hz			
OUTPUT					
Voltage (Standard)		480/277 V: Three-Phase, Four-Wire + Ground with Auto Transformer***		208/120 V: Three-Phase, Four-Wire + Ground	
Frequency	50/60 Hz, +	50/60 Hz, +0.1% Auto-Sensing Standard. (50/60 Hz Selectable, for use as Frequency Converter)			
Voltage Regulation		+/-3%			
Power Factor		0.9 Lagging Inverter: 125% for 90 Seconds, 150% for 30 Seconds, Bypass: 125% for 10 Minutes, 1000% for 10 Milliseconds			
Overload	Inverter: 125% for	90 Seconds, 150% for 30 Seconds, B	Bypass: 125% for 10 Minutes, 1000%	for 10 Milliseconds	
BATTERY					
DC Link		288 VDC			
Ripple Voltage		<0.5%			
ENVIRONMENT					
Temperature Range		14° to 122°F (-10° to 50°C)			
Relative Humidity		5% to 95% Non-Condensing			
Full-Load Efficiency	85%	84%	89%	88%	
25% Load Efficiency	72%	73%	76%	77%	
Altitude		3300 ft. (1000 m) Maximum Without Derating			
Air Filtration		Airflow top-to-front with top-located filters  <65dBA @ 1 m Typical			
Audible Noise	_	<920BA @	1 m Typical		
DIMENSIONS					
Dimensions		84.34"W x 38.72"D x 92.09"H (2142 mm x 938 mm x 2339 mm)		59.38"W x 38.70"D x 92.09"H (1508 mm x 983 mm x 2339 mm)	
Weight****	<u> </u>	1,220-1700 lbs. (553.4-771.1 kg)		970-1,020 lbs. (440.0-462.7kg)	
ADDITIONAL FEATURES	,	6/	, , , , , , , , , , , , , , , , , , , ,	(	
Color	_	White Outdoor Smooth Powde	er Coat (Stainless Steel Option)		
Monitoring	Tou	Touchscreen Operator Interface, UPS Status N/O Dry Contacts, RS232C Interface (Optional RemotEye® 4 Intelligent Monitoring System)			
Options		Internal Batteries, Internal Transformers, Single or Dual Input Feed, Remote Status Alarm Panel, Air Filters		Single or Dual Input Feed, Remote Status Alarm Panel, Air Filters	
Features		18 Guage Steel Enclosure, TVSS Included on Primary and Bypass Inputs, Integrated Rotary MBS, Enclosure Anchoring Bolts			
Standards	UL/C	UL/CUL 1778 Listed, ISO 9001, ISO 14001, ANSI C62.41 (IEEE 587), NEMA PE 1-1993			
Warranty		3-Year On-Site Warranty; See Toshiba Warranty Policy for Full Details			
Service		24-Hour, 365-Day Technical Support: 1-877-867-8773			

<sup>\* &</sup>quot;X" in the last 2 digits of model number changes to reflect configuration of output voltage transformers and choice of single vs dual input











#### **TOSHIBA POWER ELECTRONICS**

Uninterruptible Power Systems • SCiB™ Lithium Ion Batteries • Energy Management Systems
Remote Monitoring • High Power Chargers • Containerized Solutions
PDU • RPP • Server Rack Enclosures





<sup>\*\*</sup> Standard model includes 480D - 208Y Isolation Transformer. Other Isolation Transformer Options available (200-600 V)

<sup>\*\*\*</sup> Standard model includes 208Y - 480Y Auto Transformer. Other Auto Transformer Options available (200-600 V)

<sup>\*\*\*\*</sup> Weight will vary based on internal transformer & dual input options