

**TOSHIBA**  
Leading Innovation >>>



**5000 SERIES** >>>  
UNINTERRUPTIBLE POWER SYSTEMS

# 5000 SERIES 3P1

## INDUSTRY-PROVEN RELIABILITY.



In 1967, Toshiba introduced the world's first large-capacity uninterruptible power system (UPS). Today, Toshiba International Corporation continues this tradition with the launch of its industrial-duty 5000 Series UPS. The 5000 Series double-conversion UPS is available in a three-phase in, single-phase out 3P1 solution. The Toshiba 3P1 solution is designed to push the boundaries of UPS performance standards in petrochemical, oil, and gas refineries. All Toshiba 5000 Series models feature industrial-rated components designed for a 20-year lifespan.

### STANDARD FEATURES:

- Ready for Chemical Plant Applications
- Double-Conversion UPS Protection
- 120 V DC Battery Link
- 65 kAIC-Rated
- Internal Maintenance Bypass
- Copper-Wound Galvanic Isolation Transformers
- TVSS Included on all Inputs
- Programmable I/O Ports
- LED Type Operation Status Indicators

<b>MODEL</b>	Model Number	50PK050KWAA
	Capacity	50 kVA
	Topology	Three-Phase In, Single-Phase Out, True On-Line, Double-Conversion Technology
<b>INPUT</b>	Voltage (Standard)	480 V: Three-Phase, Three-Wire + Ground
	Power Factor	>0.98 @ 100% Load
	Current THD	<5% @ 100%, <6% @ 25%
	Frequency	60 Hz
<b>OUTPUT</b>	Voltage (Standard)	120 V: Single-Phase, Two-Wire + Ground
	Frequency	60 Hz
	Voltage Regulation	+/-3%
	Power Factor	0.9 Lagging
	Overload Capacity	110% to 125% for 10 minutes, 150% for 60 seconds
<b>BATTERY</b>	DC Link	120V
	Ripple Voltage	<0.5% RMS
<b>ENVIRONMENT</b>	Temperature Range	32 to 104°F (0 to 40°C)
	Relative Humidity	30% to 90% Non-Condensing
	Heat Rejection	31,449 BTUs/Hour
	Full-Load Efficiency	83%
	25% Load Efficiency	77%
	Altitude	3300 ft. (1000 m) Maximum Without Derating
	Air Filtration	Airflow top-to-front with front-located filters
	Audible Noise	65 - 70dBA @ 1m typical
<b>DIMENSIONS</b>	Dimensions	96"W x 31.5"D x 78.7" H
	Weight	3218 lbs. (1,460 kg)
<b>ADDITIONAL FEATURES</b>	Color	ANSI 61 Grey
	Monitoring	Touchscreen Operator Interface, Programmable UPS Status N/O Dry Contacts, LED Operation Status Indicators, RS232C Interface, Optional RemotEye® 4 &/or HMI
	Options	Isolation Transformers, RemotEye® 4 Intelligent Monitoring System, Remote Status Alarm Panel, HMI
	Features	TVSS Included on Primary Input and Bypass, Integrated MBS
	Standards	UL 1778; UL 17025, cUL 22.2, No. 107.1, ANSI C62.41 (IEEE 587), NFPA 70, NEMA PE1-1993, OSHA, ISO 9001; ISO14001, IEC298 IP20
	Warranty	3-Year On-Site Warranty; See Toshiba Warranty Policy for Full Details
	Service	24-Hour, 365-Day Technical Support: 1-877-867-8773

# 5000 SERIES

## OPTIONS & ACCESSORIES

### > BATTERY SYSTEMS OPTIONS

The Toshiba 5000 Series 3P1 UPS works equally well with either VRLA or wet cell batteries. Batteries in Cabinets or rack configurations are available for application or run time specific requirements. Outdoor N3R Battery Cabinets available to meet specific applications.

### > UPS MONITORING

RemotEye® 4 offers real-time control, monitoring, and analysis of UPS operation. The quick and easy-to-use software can automatically initiate an orderly shutdown to connected servers to minimize any risk of data loss. 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.

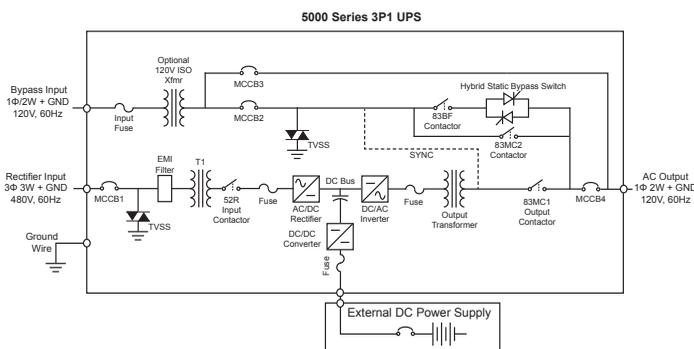
### > 5000 Series 3P1



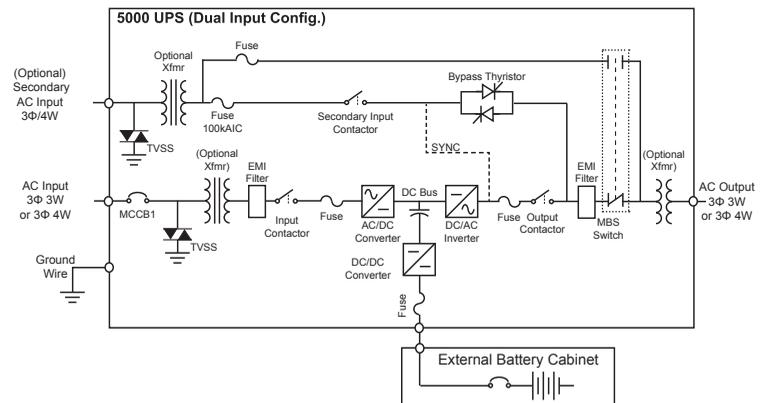
### > 5000 Series N3R



### > 5000 Series 3P1 One Line Diagram



### > 5000 Series N3R One Line Diagram



# 5000 SERIES N3R

## COMPLETE FLEXIBILITY.



The Toshiba 5000 Series Industrial three-phase uninterruptible power system (UPS) is purpose built for the rigors of industrial applications. The sturdy UPS enclosure is weatherproofed to NEMA 3R, resistant to falling dirt, rain, sleet, and snow, making it suitable for installation in both indoor and outdoor industrial settings. The double-conversion, 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.

The mechanical design allows zero rear clearance and includes bottom cable entry, standard sized air filter provisions, built-in Maintenance Bypass Switch, and lockable keyed doors with mechanical interlock that removes power from the UPS before the electronics or magnetics bay doors can be opened. Customization is available through a number of options, such as internal battery backup, internal transformers for specific voltage applications, and remote monitoring with the Toshiba RemotEye® 4 multi-protocol UPS monitoring solution. The Complete model shown here allows for maximum application flexibility in an outdoor-ready enclosure.

### STANDARD FEATURES:

- Indoor/Outdoor NEMA 3R (Waterproof) Case
- 32-122°F (0-50°C) Operational Range
- 0.9 Power Factor
- Easily Installed
- Selection of In/Out 3-Phase Voltages
- TVSS Included in all Inputs
- LED Type Operation Status Indicators

MODEL	Model Number	5CP0G020KWWK	5CP0G030KWWK
	Capacity	20 kVA	30 kVA
	Topology	True On-Line, Double-Conversion, All-IGBT Technology	
INPUT	Voltage (Standard)	480 V: Three-Phase, Three-Wire + Ground, Dual Input with Isolation Transformer*	
	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**	
	Frequency	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	
	Overload	Inverter: 125% for 90 Seconds, 150% for 30 Seconds, 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	
	Heat Rejection	10,833 BTUs/Hour	17,584 BTUs/Hour
	Full-Load Efficiency	85%	84%
	25% Load Efficiency	72%	73%
	Allitude	3300 ft. (1000 m) Maximum Without Derating	
	Air Filtration	Airflow top-to-front with top-located filters	
DIMENSIONS	Audible Noise	<65dBA @ 1 m Typical	
	Dimensions	84.34 in. (W) x 38.72 in. (D) x 92.09 in. (H) (2142 mm x 938 mm x 2339 mm)	
	Weight	2680 lbs. (1215.6 kg)	
ADDITIONAL FEATURES	Color	White Outdoor Smooth Powder Coat (Stainless Steel Option)	
	Monitoring	Touchscreen Operator Interface, UPS Status N/O Dry Contacts, RS232C Interface (Optional RemotEye® 4 Intelligent Monitoring System)	
	Options	Internal Batteries, Internal Transformers, Dual-Input Feed, RemotEye® 4 Intelligent Monitoring System, Remote Status Alarm Panel, Air Filters	
	Features	TVSS Included on Primary and Bypass Inputs, Integrated Rotary MBS	
	Standards	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	

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

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

# 5000 SERIES N3R

## COMPACT DEPENDABILITY.

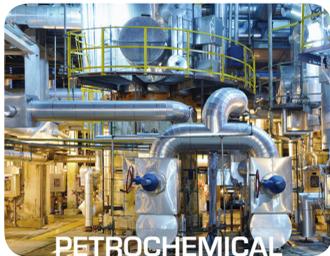


The Toshiba 5000 Series Industrial three-phase uninterruptible power system (UPS) is purpose built for the rigors of industrial applications. The sturdy UPS enclosure is weatherproofed to NEMA 3R, resistant to falling dirt, rain, sleet, and snow, making it suitable for installation in both indoor and outdoor industrial settings. The double-conversion, 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.

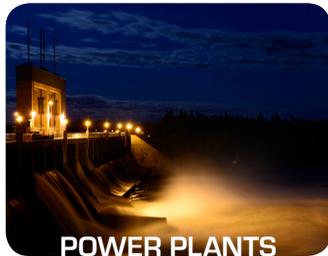
The mechanical design allows zero rear clearance and includes bottom cable entry, standard sized air filter provisions, built-in Maintenance Bypass Switch, and lockable keyed doors with mechanical interlock that removes power from the UPS before the electronics or magnetics bay doors can be opened. Remote Monitoring is available through the optional Toshiba RemotEye® 4 multi-protocol UPS monitoring solution. The Compact model shown here combines all of these features in an under 16 ft<sup>2</sup> footprint.

- STANDARD FEATURES:**
- Indoor/Outdoor NEMA 3R (Waterproof) Case
  - 0.9 Power Factor
  - 32-122°F (0-50°C) Operational Range
  - Easy Installed
  - Small Footprint

MODEL	Model Number	5CP0G020KCXC	5CP0G030KCXC	
	Capacity		20 kVA	30 kVA
	Topology	True On-Line, Double-Conversion, All-IGBT Technology		
INPUT	Voltage (Standard)	208/120V: Three-Phase, Four-Wire + Ground Single Input		
	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)	208/120 V: Three-Phase, Four-Wire + Ground		
	Frequency	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		
	Overload Capacity	Inverter: 125% for 90 Seconds, 150% for 30 Seconds, 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		
	Heat Rejection	7591 BTUs/Hour	12,563 BTUs/Hour	
	Full-Load Efficiency	89%	88%	
	25% Load Efficiency	76%	77%	
	Altitude	3300 ft. (1000 m) Maximum Without Derating		
	Air Filtration	Airflow top-to-front with top-located filters		
DIMENSIONS	Audible Noise	<65dBA @ 1 m Typical		
	Dimensions	59.38 in. (W) x 38.70 in. (D) x 92.09 in. (H)		
	Weight	1700 lbs. (771.1 kg)		
ADDITIONAL FEATURES	Color	White Outdoor Smooth Powder Coat (Stainless Steel Option)		
	Monitoring	Touchscreen Operator Interface, UPS Status N/O Dry Contacts, RS232C Interface (Optional RemotEye® 4 Intelligent Monitoring System)		
	Options	Dual-Input Feed, RemotEye® 4 Intelligent Monitoring System, Remote Status Alarm Panel, Air Filters		
	Features	TVSS Included on Primary and Bypass Inputs, Integrated Rotary MBS		
	Standards	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		
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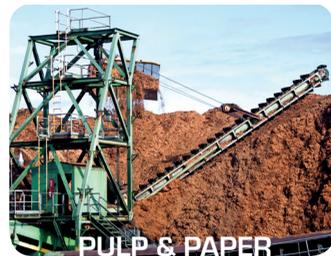
**PETROCHEMICAL**



**POWER PLANTS**



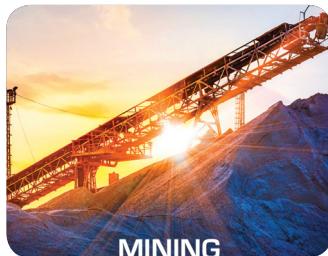
**OIL & GAS**



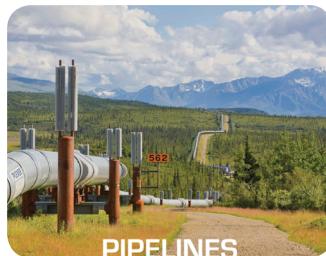
**PULP & PAPER**



**WATER/WASTEWATER**



**MINING**



**PIPELINES**



**MANUFACTURING**

**TOSHIBA POWER ELECTRONICS DIVISION:**

- Uninterruptible Power Systems
- Rechargeable Batteries
- Power Conditioning Systems
- Remote Monitoring

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