





Cyberex invented the first stand-alone STS in 1971 and the first fully digital unit in 1994. Cyberex continues to lead the market with breakthrough technologies.

# MISSION CRITICAL POWER SWITCHING AND DISTRIBUTION IN ONE INTEGRATED CUSTOM SYSTEM – ZF SERIES BY CYBEREX

Cyberex's Zero Footprint system combines dual path computer-grade power transformation and grounding, automatic dual source digital switching, system monitoring, and distribution, all in a single, factory tested system. Installation time, costs, and errors are reduced in this factory tested system.

Cyberex, the industry leader in Digital Power Switching Systems, offers you its SuperSwitch Technology in a custom configured distribution package. This integrated system provides the performance and features of a custom multi-cabinet design in a smaller, more reliable, package. The Zero Footprint series frees up valuable floor space for your facility while its factory assembly and testing enhance the reliability of your overall system.

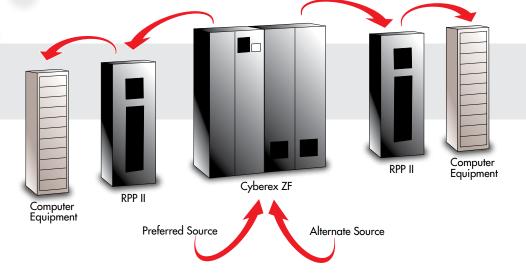
## PROVEN COMPONENTS AND PERFORMANCE

- Integrated DSTS and distribution improves reliability and availability of your critical power system
- SuperSwitch3 operator interface does not compromise reliability or ease of use
- Secondary positioned DSTS architecture puts redundancy closer to loads reducing potential failure points
- Configurable output distribution can be packaged to accommodate any downstream distribution requirements
- Software-guided system operation of DSTS eliminates the potential for operator error
- Remote monitoring interfaces to building management system
- Compact footprint maximizes usable floor space compared to conventional multi-cabinet solutions
- Easy access design minimizes time required to maintain system

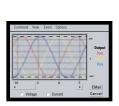


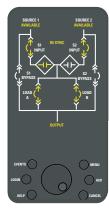
Front view of Zero Footprint showing system modularity

ZERO FOOTPRINT PROVIDES ADDED RELIABILITY TO ANY ARCHITECTURE

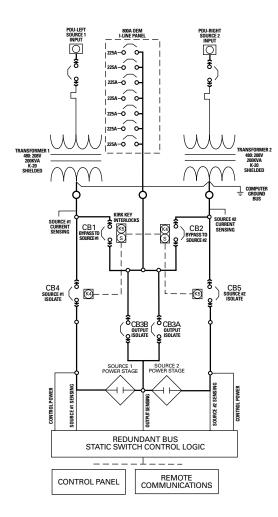


For more information go to www.cyberex.com





Navigate and control the SuperSwitch with confidence using a rotary mouse and triple redundant system status display; active mimic panel, LCD and LED indication.



The Zero Footprint Series features two main breakers, two impedance-matched transformers and DSTS to create the ultimate mission critical system.

### **PRODUCT FEATURES**

#### **Standard**

Dual Input K Rated (	Computer Grade	Isolation	Transformers
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100% Continuous Duty Rating

Digital Signal Processor Based, Fully Digital Switching Controls

(6) Plug-In Circuit Breaker Configuration

Dual Maintenance Bypass Design

Redundant Output Distribution Breakers

Key Interlocking for Safety and Accuracy

Comprehensive System Interface Panel

Operator Guided Bypass Controls

System Mimic Display

LCD Display

2500 Real-Time Event & Alarm Log

Transfer Counter

Metering Display of kVA, kW, Ipeak, Phase, Voltage & Frequency

Multiple Layers of Password Protected Controls

Modbus Communications Interface

### **Optional**

Waveform Capture

Up to (2) I-Line Output Distribution Panelboards

Up to (4) 42 Circuit Output Panelboards

Output Distribution Breaker Monitoring

## **OPERATING PARAMETERS**

Input Voltage	480V*
Output Voltage	208/120V
Frequency	50 or 60Hz
Automatic Sense & Transfer Time	Less Than 4ms

<sup>\*</sup>Other input voltages available as options

## PHYSICAL DIMENSIONS

	Output Distribution	kVA/Amps	Output Voltage	Dim. (WxDxH)
ſ	(2) Output Breakers	144kVA/400A		92"W x 36"D x 78"H
	Up to (10) Output Breakers	216kVA/600A 288kVA/800A	0A 208/120V	103"W x 36D x 78"H
Ī	Up to (20) Output Breakers			126"W x 36"D x 78"H

## DID YOU KNOW?

Cyberex has over 30 years of experience, more than any other manufacturer

## **ZF SERIES TECHNICAL SPECIFICATIONS**

#### **Electrical**

kVA	75-300kVA
Input	3 Phase, 3 Wire + Ground
Input Voltage	480V @ 60Hz
Output	3 Phase, 4 Wire + Ground
Output Voltage	208/120V 480/277V @ 60Hz
Transformer Ratings	K20 (Std.) K4, K13 (opt.)
Transformer	Copper, Dual Electrostatic Shield
Transformer Temperature Rise	150°C (Std.) 80°C, 115°C (Opt.)
Transformer Compensation Taps	2 1/2% (4 x FCBN, 2 x FCAN)
Transformer Insulation	220°C
Neutral Rating	200%

## **Operating Conditions**

Temperature (Operating)	0 to 40°C
Temperature (Storage)	0 to 60°C
Transformer Audible Noise	<60 dBA (Max.)
Maximum Operating Altitude	8,200 Ft (2,500 M)
Operating Efficiency	98%

### General

SCR	Fully Rated, Hockey-Puck Type	
Cooling	PDU – Convection STS – Dual Redundant Fans	
LCD	Graphical User Interface	
STS Power Supplies	Triple Redundant	
STS Internal Bus	Dual Redundant	
STS TVSS	40kA	

#### **Communications**

Password Protection	Defined User Tiers
Protocol	Modbus RTU (RS-485); Modbus TCP
STS Alarm Notification	Email (or Email to Pager)
Emergency Power Off	Remote (Std.) Local (Opt.)
STS Relay Contacts	5 (Std.)
Waveform Capture	(Opt.)

## **Power and Event Management**

Metering	kVA, kW, Ipeak, Phase, Current, Voltage, Frequency,
	Power Factor, kVA Demand, THD, Percent Load, Sag,
	Surge, Transient
Event Alarm Log	2500 Events

### **Standards**

NEMA	All Applicable Standards
UL	PDU – UL 478 Listed or Compliant STS – 1008 Listed
FCC	FCC Compliant (Part 15)
NEC	All Applicable Standards
ANSI	C62.41

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