

# 1:N Switch Controller for Frequency Converters

## Switch Controller ARSP-N

### Features

- One rack unit (1RU) compact shelf
- Low cost for up to 1:12 switching control
- Scalability: 1:2 - 1:12
- Fast alarm detection and switch
- Configuration of each converter is stored and updated
- Single RS-485 port for all units
- An additional RS-485 M&C port for remote control or an integrated M&C system
- Front panel display of status and control functions

### Overview

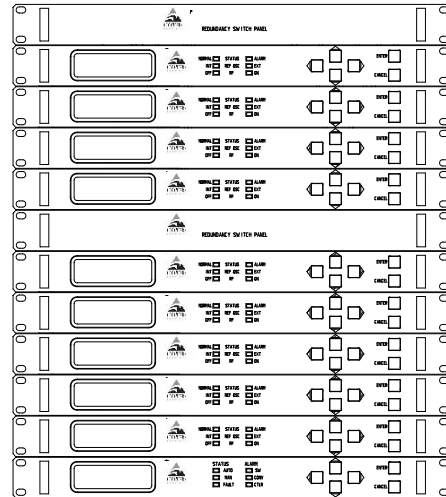
The ARSC Switch Controller for Frequency Converters will handle up to twelve frequency converters and one backup frequency converter for IF input /RF output switching. Use of the Switch Controller for Frequency Converters allows the number of frequency converters to be increased or decreased simply by connecting or disconnecting the frequency converter with its associated IF input /RF output switches.

### Application

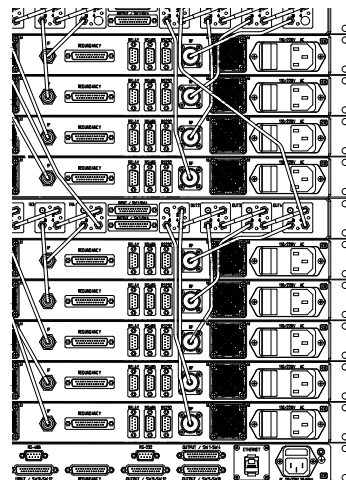
The ARSC Switch Controller of Frequency Converters is a compact shelf assembly designed to provide logic and control of IF input switch units and RF output switch units. The switch controller will provide "daisy chain" type 1:N (N is 2~12) protect switching for a group of frequency converters. If one on-line frequency converter fails, it will immediately send an alarm by a dedicated line in the ribbon daisy-chain cable to the Switch Controller. At almost same time, the Switch Controller will send switch commands to relevant IF input & RF output switches and configuration information including frequency and attenuation of failed frequency converter to the backup frequency converter before it will be switched to be on-line. Typically, total switch time will be less than 50ms.

### Options

- Discrete Interface
- Ethernet port and SNMP Interface



Front View of 1:8 Redundant System shown



Rear View of 1:8 Redundant System shown

## 1:N Switch Controller for Frequency Converters

### Interfaces

To IF Switches  
To RF Switches  
RS-485 Serial Port  
Redundancy  
RS232  
Ethernet  
Power

Three D-sub 25 connectors  
Three D-sub 25 connectors  
D-sub 9  
D-sub 25  
DB9  
(optional) RJ45 F  
IEC 320 type 10 amp

### Mechanical

Dimensions

Width 19" (482.6 mm)  
Height 1U 1.75" (44.45 mm)  
Depth 20" (254 mm)  
Weight 3.6Kg (8 lbs.) max

### Power Supply

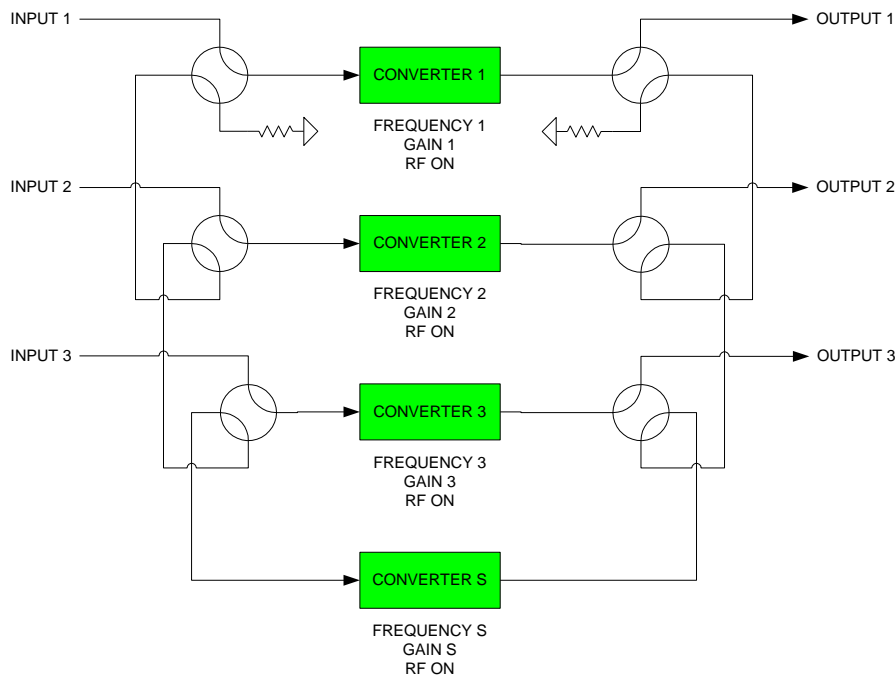
Voltage  
Power

90 – 265 VAC (47 – 63 Hz)  
30W (typical)

### Environmental

Operational  
Storage  
Humidity  
Altitude

0°C to +50°C standard  
-55°C to +85°C  
Non-condensing  
10,000m AMSL



Block Diagram of 1:3 Redundant System with Down-Converters shown

Ref.: PB-FC1N-SWITCHCONT-001-19026

#### NORTH AMERICA

**USA**  
info.usa@advantechwireless.com

**CANADA**  
Info.canada@advantechwireless.com

#### EUROPE

**UNITED KINGDOM**  
info.uk@advantechwireless.com

#### SOUTH AMERICA

info.latam@advantechwireless.com

**BRAZIL**  
info.brazil@advantechwireless.com

#### ASIA

info.asia@advantechwireless.com

**INDIA**  
info.india@advantechwireless.com