When delivering a centralized reference signal to a number of different equipment stations without degrading the signal is critical, Symmetricom offers the largest selection of quality time and frequency distribution receivers, amplifiers and modules in the world.

These products provide accurate centralized reference signals with the best quality, lowest noise and the most uptime to an assortment of communication infrastructures, thereby assuring the highest level of precision and reliability throughout the system.

When used with Symmetricom's GPS receivers, frequency standards and oscillators, our time and frequency modules effectively distribute signals and generate all rates needed for today's complex communication systems, satellite earth stations, test facilities and engineering laboratories.

6502B

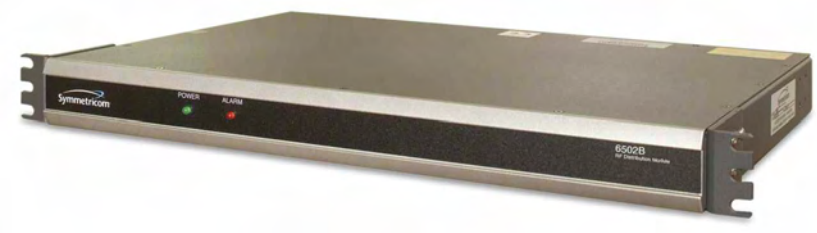
RF Distribution Module

KEY FEATURES

- Low Phase Noise
- High Channel Isolation
- Ten Channel Output Distribution
- Daisy Chain For More Than 100 Outputs
- CE Compliant

The Symmetricom 6502B Distribution Module is a ten channel, RF distribution amplifier packaged in a 1U rack mount chassis. It is comprised of ten, low phase noise RF amplifiers that maintain high channel isolation (>100dB). Up to ten units can be daisy chained together to give up to 100 outputs or each output of one unit can be used as a source for other 6502B units to give almost infinite expansion capability with virtually no signal degradation.

The 6502B standard configuration accepts input frequencies from 0.1MHz to 10MHZ at 1Vrms amplitude and provides ten buffered outputs of the same frequency. Each output and input has an alarm indicator that warns of either a loss of signal or a signal of insufficient amplitude.



6502B RF Distribution Module

6502B SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

- RF output (ten)

Frequency:	0.1 to 10 MHz
Level:	1 V rms (nominal)
Gain:	1 (nominal)
Harmonic distortion:	<-40dB
Non-harmonic signals:	<-80dB
Load impedance:	50Ω
Isolation:	>100dB*
Connectors:	BNC

*Isolation between channels one to ten >130dB

- Additive SSB phase noise

(1 Hz Bandwidth)	Offset from carrier
1 Hz	-120dB
10 Hz	-135dB
100 Hz	-145dB
1,000 Hz	-155dB
10,000 Hz	-160dB

- RF input

Frequency:	0.1 to 10 MHz
Level:	1 V rms (nominal)

- Alarm output

Summary alarm indicates failure of any output signal.

Each output & main:	Red LED
Non-alarm condition:	Relay energized (fail safe) C Form contacts
Alarm output disable:	Panel switch
Connector:	9 pin D-male

- Controls & indicators

Power:	Green LED, power is connected
Alarm:	Red LED, signal output failure

Please note: If input level is less than 10dBm specify low alarm threshold version (-509).

ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

- Temperature (operating): 0°C to 55°C
- Relative humidity: 0 to 95%, non-condensing
- Power requirements
  - AC input (±10%): 100 - 120 VAC, <10W
180 - 240 VAC, <10W
  - DC input (optional): 22V to 56 VDC, <10W
- Dimensions
  - Height: 1U (~1.75 inches) (4.44 cm)
  - Width: 19" (48.26 cm)
  - Depth: 12" (30.48 cm)
- Weight: <5 lbs. (2.25 Kg)
- MTBF: >500,000 hrs

ORDERING INFORMATION	Part No.
• 6502B Standard Configuration	14364-101
• 6502B with DC input	14364-102
• 6502B with option 509	14364-104
• 6502B with option 509 and DC input	14364-105
• 6502B without alarm override switch	14364-106

Rear View

4036B

1x15 RF Distribution Amplifier

KEY FEATURES

- Low Phase Noise
- High Channel Isolation
- 15 Outputs
- Yields 225 Outputs at 2nd Level
- LED Status Indicators for All Inputs and Outputs
- Status Information via Ethernet
- Settable Gain
- CE Compliant

Symmetricom's 4036B is a 1-input, 15-output RF distribution amplifier in a 1U chassis. It provides fifteen isolated copies of a single input. The unit operates over a frequency range of 1MHz to 20 MHz. Fault sensing of signal level is provided on the input and every output. Faults are indicated on front panel LEDs as well as via an Ethernet interface.

4036B 1x15 RF Distribution Amplifier

4036B SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

- RF Output (15)

Frequency:	1 MHz – 20 MHz
Input level:	0 to 1 V rms (13 dBm)
Gain:	0dB, jumper selectable -1dB, 1dB or 2dB
Input/output impedance:	50Ω
Isolation:	>100 dB
Spurious distortion:	<-80 dBc
Harmonic distortion:	<-40 dBc
Connectors:	BNC female

- Additive SSB Phase noise

1Hz	-135 dBc
10Hz	-145 dBc
100Hz	-155 dBc
1kHz	-163 dBc
10kHz+	-163 dBc

- Status
  - Senses signal presence on all inputs and outputs
  - Green/Red LEDs on Front Panel
  - LED Indicators for 5 MHz, 10 MHz, and Other
  - Network interface
    - Ethernet 10/100 Base T
    - RJ 45 Connector
    - Protocols: TCP/IP, UDP/IP, ARP, Telnet, DHCP, BOOTP, HTTP and AutoIP

ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

- Temperature: 0°C to 50°C
- Humidity: 0 to 95% non-condensing
- Power requirements (AC Input): 90 – 264 V AC, 10W, 47 – 63 Hz
- Dimensions: 1U (~1.75" / 4.44cm) x 19" (48.26cm) x 12" (30.48cm)
- Weight: 9 lbs (4.10 Kg)

ORDERING INFORMATION	Part No.
• 4036B Standard Configuration	TSC 4036B

Rear View

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5087B

Wideband Distribution Amplifier

KEY FEATURES

- 12 Channel Wideband Sine Wave Distribution
- +13 dBm to +22.5 dBm Adjustable Output Power
- Accepts +3 to +22.5 dBm Inputs
- Input AGC Maintains Output Level with Varying Input Level
- High Isolation/Low Cross-talk Between Outputs
- Low Additive Phase Noise
- Front Panel Status Indicators for Health Monitoring at a Glance
- Ethernet Port for Remote Control and Monitoring
- Fault Alarm Output

The 5087B Wideband Distribution amplifier is an economical solution for distributing signals from various frequency standards such as Cesium, Rubidium, Quartz or GPS receivers.

APPLICATIONS

Frequency standards typically have few outputs, each of which drives one load over short distances. When you have many devices requiring frequency reference inputs, or you need to deliver the frequency standard output from one building to another, the 5087B is the right choice.

- **Standards lab** – simultaneous calibration of multiple test equipment.
- **Manufacturing and R&D** – connecting all test equipment in a rack to the same frequency source.
- **Intra-building distribution** – distributing frequency standards from the cal lab to manufacturing and R&D.

High output-to-output isolation and output-to-input isolation keeps the effects of "accidents" from propagating to other channels or upstream to the frequency standard. For example, if an output is accidentally shorted or someone connects an active signal to the output of the distribution amplifier, the effect is minimized on any other output.

FAULT MONITORING

Front panel lights allow you to check status of the amplifier at a glance. Indicators are provided for power, alarm, input, and all 12 outputs.

An alarm occurs whenever there is loss of input signal, or loss of any of the 12 outputs. The alarm signal can be connected to audible or visible alarms, or logically "Ored" to other alarms.

Full remote control and monitoring of the amplifier can be done through the Ethernet port, including checking status and alarm conditions.

5087B Wideband Distribution Amplifier

5087B SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

- Inputs

Number of inputs:	1
Frequency range:	1 to 10 MHz
Signal type:	Sine wave
Connector:	Rear panel BNC (female) Shield is chassis (earth) ground
Amplitude:	0.3 Vrms to 3 Vrms Automatic Level Control
Impedance:	50Ω nominal
Input status[1]:	Front panel indicator
Damage level:	+24 dBm
VSWR:	<1.5:1

- Frequency outputs[2] (into 50Ω)

Number of outputs:	12
Frequency range:	1 to 10 MHz
Signal type:	Sine wave
Connector type:	Rear panel BNC (female) Shield is chassis (earth) ground
Amplitude[3]:	1 Vrms to 3 Vrms adjustable
Impedance:	50Ω nominal
Harmonics[4]:	<-40 dBc
Spurious 10 Hz - 50 kHz:	<-80 dBc
Channel status[5]:	Front panel indicator

Single sideband additive phase noise (1 Hz bandwidth) 10MHz carrier

Offset frequency	Phase Noise (dBc/Hz)
1 Hz	-110
10 Hz	-123
100 Hz	-128
1 kHz	-144
10 kHz	-150

Isolation[6]

Output to output:	<-104 dBc (typical)
Output to input:	<-100 dBc
VSWR:	< 1.5:1

- Alarm port

Connector type:	BNC
Normal state:	TTL high
Alarm state:	TTL low
Output configuration:	Open-collector, 10k Ohm pull-up to 5 Vdc
Alarm conditions:	Loss of input signal, activation of input alarm, loss of any of 12 frequency outputs.
Status:	Front panel LED

- Remote interface

Data communications:	Ethernet (10 Base T)
Connector type:	RJ-45

ENVIRONMENTAL SPECIFICATIONS

- Temperature

Operating:	0°C to +50°C
Non-operating:	-62°C to + 75°C

- Humidity

Operating:	95% non-condensing, 40°C

- Altitude

Operating:	15,000 ft

- Shock: Meets IEC 60068-2-27 requirements
- Vibration: Meets IEC 60068-2-6 for sinusoidal vibration and IEC 60068-2-64 for random vibration requirements.
- EMC: Meets EN61326-1:2001 Electrical Requirements for Electrical Equipment for Measurement, Control and Laboratory use- Part 1: General Requirements EN 55011 Class A, Radiated Emissions.
- Safety: Meets EN61010-1:2001 Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory use- Part 1: General Requirements. UL/CSA Certified product

SUPPLEMENTAL CHARACTERISTICS

- Mechanical characteristics

Net weight:	6.2 kg
Shipping weight:	10 kg
Dimensions	
Height:	90 mm (2U rack)
Width:	450 mm (standard 19-inch rack)
Depth:	364 mm (excluding connectors)

- Power requirements

AC input[7]:	100-240 VAC; 50 to 60 Hz

- Warranty: 1 year, return to Symmetricom

NOTES

1. Input status indicates if input amplitude drops below 0.3 Vrms. It does not indicate signal quality (frequency accuracy or stability) nor wave shape.
2. All outputs are always active. To reduce noise, connect a 50Ω terminator (not supplied with unit) on unused outputs.
3. An ALC circuit on the input amplifier assures output amplitude consistent with desired setting in the range 1 to 3 Vrms, into 50Ω.
4. Assumes harmonic distortion of <-50dBc of input signal.
5. Output channel status indicates if output drops below 0.3 Vrms (+2.6 dBm) at the output BNC connector, not at the end of the attached cable.
6. Output isolation is measured by injecting 900 Hz signal (0.5Vpp about 20us wide) into an output port and measuring the associated phase noise spur at 900 Hz offset on adjacent output ports and input port.
7. Auto sensing AC mains supply. A "power on" LED is located on the front panel.

Rear view

4059B

1x15 Low Frequency Distribution Amplifier (IRIG A/B or G)

KEY FEATURES

- Exceptional IRIG A/B or G Distribution
- High Channel Isolation
- 15 Outputs
- Yields 225 Outputs at 2nd Level
- LED Status Indicators for All Inputs and Outputs
- Status Information via Ethernet
- CE Compliant

Symmetricom's 4059B is a one-input, fifteen-output IRIG Distribution Amplifier in a 1U, 19 inch rack mount chassis. It provides fifteen isolated (>70 dB) outputs from a single input. This unit is ideal for distributing IRIG A/B or G. An Ethernet port on the rear panel provides the capability to remotely monitor the status of the input and all output signals. Any failure in the unit will immediately provide an alarm to this port. The front panel provides green LED status for the input and green/red for all output signals, as well as indicating an input of 1 kHz, 10 kHz, or other. A green LED on the front panel also provides power status.

4059B 1x15 Low Frequency Distribution Amplifier (IRIG A/B or G)

4059B SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

- Time code input and outputs (15)

Code format:	Any
Modulation frequency:	1 – 100 kHz
Modulation ratio:	Any
Amplitude:	<6 V P-P
Output isolation:	>70 dB
Gain:	0 dB
Input impedance:	Jumper Selectable 50 ± 5Ω or 10k ± 100Ω
Output impedance:	50 ± 5Ω

- Status

  Senses signal presence on all inputs and outputs
  Green/Red LEDs on Front Panel
  LED Indicators for carrier frequency – 1 kHz, 10 kHz, and Other
  Network (RJ-45 connector)

ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

- Temperature: 0°C to 50°C
- Humidity: 0 to 95% non-condensing
- Power requirements (AC Input): 90 – 264 V AC, 10W, 47 – 63 Hz
- Dimensions: 1U (~1.75" / 4.44cm) x 19" (48.26cm) x 12" (30.48cm)
- Weight: 9 lbs (4.10 Kg)

ORDERING INFORMATION	Part No.
• 4059B Standard Configuration	TSC 4059B

Rear View

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4033A

1x15 Pulse Distribution Amplifier 5V Output

KEY FEATURES

- Detects 1PPS, IRIG-B, or Other
- Compact Rack Mount 1U-High Package
- ±500ps Differential Delay Between Outputs
- LED Status Indicators for All Inputs and Outputs
- Status Information via Ethernet
- CE Compliant

Symmetricom's 4033A is a one-input, fifteen-output pulse distribution amplifier in a 1U, 19-inch rack mount chassis. It provides fifteen isolated outputs from a single input. An Ethernet port on the rear panel provides the capability to remotely monitor the status of the input and all output signals. Any failure in the unit will immediately provide an alarm to the Ethernet port. The front panel provides green LED status for the input and green/red for all output signals, as well as indicating an input of 1PPS, DC IRIG, or Other.

4033A 1x15 Pulse Distribution Amplifier 5V Output

4033A SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

- 1PPS Output (15)

Output impedance:	50 ±5Ω
Load impedance:	50Ω
Logic one:	4.5 V minimum
Logic zero:	+0.8 V maximum
Rise time:	<2.0 ns
Fall time:	<2.0 ns
Jitter:	<50 ps rms
Skew between outputs:	<±2 ns
Connectors:	BNC female

- 1PPS Input

Repetition rate:	1PPS – 1MPPS
Duty cycle:	0 – 50%
Input impedance:	50Ω
Logic one:	>2.4 V
Logic zero:	+0.8 V maximum
Connector:	BNC female

- Status

  Senses signal presence on all inputs and outputs
  Green/Red LEDs on Front Panel
  LED Indicators for 1PPS, DC IRIG, and Other
  Network (RJ-45 connector)

ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

- Temperature: 0°C to 50°C
- Humidity: 0 to 95% non-condensing
- AC Input: 90 – 264 V AC, 10 W, 47 – 63 Hz
- Dimensions: 1.75" (4.44 cm) H x 19" (48.26 cm) W x 12" (30.48 cm) D
- Weight: 9 lb (4 kg)

ORDERING INFORMATION	Part No.
• 4033A Standard Configuration	TSC 4033A

Rear View

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9611

Switch & Distribution Unit

KEY FEATURES

- Automatic Selection of Redundant Signal Inputs
- Twelve Signal Outputs
- Flexible Signal Configuration
- RS-232/422 Control Port
- Up To 32 Units on One Common Control Port
- CE Compliant

Symmetricom's 9611 Switch & Distribution Unit is an intelligent switching, monitoring and distribution system, packaged in a 1U rack mount chasis. It includes a dual input A-B switch that provides a powerful redundant capability.

The internal microprocessor can be set up to switch on a number of critera (i.e., voltage level and period detection). Internally, the unit can be configured to direct selected signals to up to twelve independently buffered outputs. Each output can be set for internal monitoring of the output signals. In addition, each output system can be set up as a signal monitor. Any single-ended type signal can be connected to any output line and that line can be configured to simply monitor the signal. The input signal can be connected to any output buffer for additional distribution of the input signal.

The internal microprocessor is controlled, configured and monitored by means of an RS-232 input/output port. Switch status as well as output status is reported on the front panel for immediate feedback of information to the operator as well as via the RS-232 port. A second connector on the rear panel allows up to thirty-two units to be daisy-chained and controlled via a single serial port on the computer.

This universal and highly versatile instrument is unequalled in the industry. No other low cost system offers these capabilities in a single product.

9611 Switch & Distribution Unit

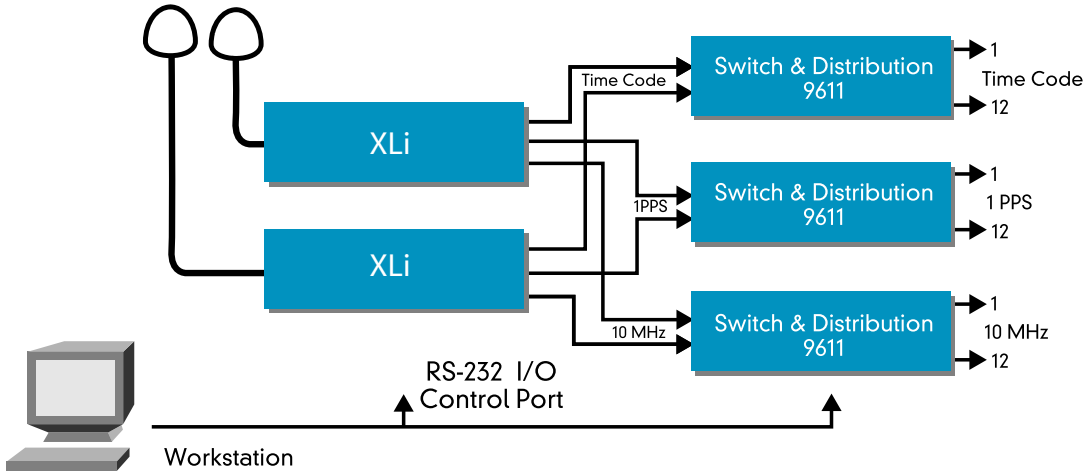
9611 SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

- Output levels: 0-6 volts p-p, DC-10 MHz (3 volts p-p above 5 MHz)
- Output impedance: (selectable) 10Ω, 50Ω or 600Ω
- Input levels: 0-6 volts p-p, DC-10 MHz
- Input impedance: 50Ω or 1K, selectable
- Time period selection
  - Range: 300 ns to 100 seconds in decade steps
- Distortion: Total harmonic at 10MHz, 3 V P-P into 50Ω
  Less than 0.5% (-40 dB)
  Spurs less than 60 dBc above 1KHz
- Phase noise (-dBVrms/÷Hz): At 10MHz, 3 V P-P into 50Ω when using channel A or B as input
  Less than 102 @ 1Hz
  Less than 125 @ 10Hz
  Less than 140 @ 100Hz
  Less than 145 @ 1KHz
  Less than 150 @ 10KHz
  Less than 160 @ 100KHz
  Spurs less than -120 dB @ 1KHz
- Crosstalk: Channel B into Channel A, less than 40dB at 10MHz.
- Reverse isolation: Channel 1 through 12 to any other channels 1 through 12, less than 60dB at 10MHz.
- Hum noise levels: Less than -70dB

ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

- Temperature
  - Operating: 0ºC to 50ºC
  - Non-operating: -40ºC to +70ºC
- Humidity (non-condensing)
  - Operating: 10% to 90%
  - Non-operating: 5% to 95%
- Altitude
  - Operating: 0 to 25,000'
  - Non-operating: 0 to 40,000'
- Power requirements
  - AC input: 120 or 230 V AC, <10W
- Dimensions
  - Height: 1U (~1.73") (4.39 cm)
  - Width: 19" (48.26 cm)
  - Depth: 13" (32.02 cm)
- Weight: ~7.5 lbs. (3.37 Kg)



Working Diagram

Rear View

4091A

1U RF Autosense Fault Switch and Distribution Amplifier

KEY FEATURES

- HOT SWAP Power Supply
- 1-20 MHz Operation
- Eight Signal Outputs
- Manual Override
- Remote Control via Ethernet
- CE Compliant

OPTIONAL FEATURES

- Redundant AC Power

The 4091A is a 1U rackmount fault sense switch that accepts two RF inputs and produces eight outputs (chosen from the two inputs). The unit comes standard with a single HOT SWAP AC power supply and can be configured with redundant HOT SWAP AC power supplies. It has LED indicators that display the selected input as well as a control switch that is used to manually operate the switch or place the switch in "auto" mode. When in "auto" mode, the unit automatically switches upon failure of the selected input. In addition to front panel control, the unit can be controlled remotely via the Ethernet port on the rear of the unit.

4091A 1U RF Autosense Fault Switch and Distribution Amplifier

4091A SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

- RF Input (2)

Frequency:	1 - 20 MHz
Level:	1 V RMS nominal into 50Ω
Connectors:	BNC female
Control:	Locking Toggle

- RF Output (8)

Connectors:	BNC female
Gain:	1.0 +/- 10%
Harmonics:	<-40 dBc
Spurious:	<-80 dBc

- SSB Phase noise

1 Hz	-135 dBc
10 Hz	-145 dBc
100 Hz	-155 dBc
1 kHz	-163 dBc
10 kHz +	-163 dBc

- Control & status

  Switch between inputs
  Set to autoswitch on input failure
  Signal presence on all inputs and outputs
  Green/Red LEDs on Front Panel
  Network (RJ-45 connector)

ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

- Temperature: 0°C to 40°C
- Humidity: 0 to 95% non-condensing
- Power requirements (AC Input): 90 – 264 V AC, 10W, 47 – 63 Hz
- Dimensions: 1U (~1.75" (4.44cm) x 19" (48.26cm) x 12" (30.48cm)
- Weight: 12 lbs (5.40 Kg)

ORDERING INFORMATION	Part No.
• 4091A with Single AC Power	TSC 4091A
• 4091A with Redundant AC Power	TSC 4091A-01

Rear View

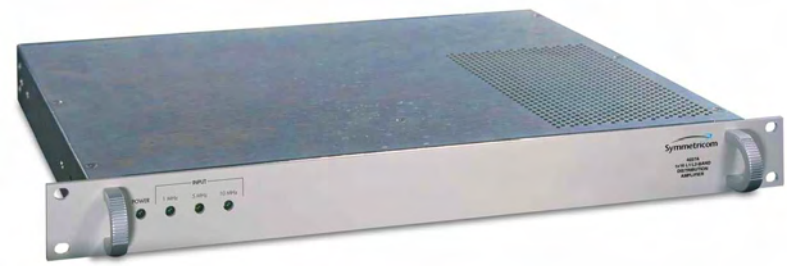
4037A

1x16 L1/L2-Band Distribution Amplifier

KEY FEATURES

- Exceptional L1/L2-Band Distribution
- 16 Outputs
- LED Status Indicators for Power
- CE Compliant

Symmetricom's 4037A is a one-input, sixteen-output L1/L2-Band amplifier in a 1U, 19 inch rack mount chassis. It provides sixteen isolated (>15 dB) outputs from a single input. This unit is ideal for distributing GPS antenna signals. The front panel provides green LED status for the power and antenna bias voltage setting.



4037A 1x16 L1/L2-Band Distribution Amplifier

4037A SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

- Input and outputs (16)

  TNC Connectors

Frequency:	L1/L2-Band
Output isolation:	>15 dB
Gain:	0 dB
Impedance:	50 ± 5Ω

- Status

  Green LEDs on Front Panel
  LED Indicators for Power, Antenna Power (5 V,12 V or None)

ENVIRONMENTAL & PHYSICAL SPECIFICATIONS

- Temperature: 0ºC to 50ºC
- Humidity: 0 to 95% non-condensing
- Power requirements (AC Input): 90 – 264 V AC, 10 W, 47 – 63 Hz
- Dimensions: 1U (~1.75" / 4.44cm) x 19" (48.26cm) x 12" (30.48cm)
- Weight: 9 lbs (4.10 Kg)

ORDERING INFORMATION	Part No.
• 4037A Standard Configuration	TSC 4037A

Rear View

56000

Modular Time & Frequency Distribution System

KEY FEATURES

- Frequency Generator and Distribution
- Time Codes Generator and Distribution
- Up to 3 External Redundant References
- All Modules are Hot Swappable with Easy Plug & Play Operation
- Completely Redundant System
- Monitoring Capability of All Inputs and Outputs
- Network-Based Management
- Powerful SNMP Interface
- User-Friendly HTML Interface
- 16 Module Slots with Up to 6 Independently Programmable Outputs Per Module
- Copper and Optical Fiber Optics for Inputs / Outputs
- Front LEDs Status Indicators on All Modules
- External T1 Reference Input

MAJOR APPLICATIONS

- Communication Systems
- Encryption & Decryption
- Station Clock CDS10 & CDS20 Replacements
- Earth Station and Mobile Station SATCOM
- Distribution of Specialized Signals
- Secure Frequency Agile
- Any Applications Requiring Precise E1/T1 Frequencies

Symmetricom's 56000 is a versatile Data Rate Clock (DRC) and Distribution System supporting an extensive variety of input references, oscillators, output frequencies, input/output interface styles, powerful network based management tools, and complete power supply plans. The modular architecture supports various clock rates and frequencies required in today's sophisticated communications applications.

The 56000 backplane can accept 1, or 10 MHz; IRIG B time code; and any TTL signal from DC to 10Mbps. Multiple redundant external frequency references can be applied to a hitless switch (passive combiner) located on each frequency synthesizer circuit card. The hitless switch provides a glitch-free transition from one input source to another, ensuring reliable and disturbance-free outputs, even in the event of failure of one of the input sources. The frequency reference inputs can be replaced or enhanced by an on-board oscillator circuit card or an on-board GPS timing receiver. The oscillators are disciplined to either the input frequency or GPS. Using the oscillators in combination with external reference inputs provides various levels of redundancy. The oscillators also add holdover capability so that uninterrupted operation is maintained in the event of total failure of the reference input(s).

Model 56000 outputs can include distributed or generated clock signals, frequencies, Network Time Protocol, and IRIG B time code. N.1 clock rate generation from 1Hz to 25MPPS in 1PPS steps is available in addition to N.8 clock rate generation from 8 KPPS to 8.192 MPPS in 8KPPS steps. Also available is a Telecommunications Interface that provides a variety of outputs and alarms common in today's telecommunications applications. The chassis is configured with front and rear plug-in cards. The front panel plug-in circuit cards perform the modular rate generation and distribution functions and are hot swappable. The rear panel interfaces are also implemented using plug-in cards with a wide variety of connector types and styles. Of the 21 card slots available, four are reserved for the power supply(s), and the balance can hold almost any combination of available circuit cards. The basic chassis includes power supply, power input module, fault monitoring CPU and a CPU interface module. There are 16 available card slots for the various synthesizer/ distributor cards. Additional 56000 systems can be daisychained using an optional on-board fiber optics transmitter and receiver pair. Large networks of time-frequency distribution can be constructed using the fiber optics link.

56000 Modular Time & Frequency Distribution System