



**ptf**

## 1206A & 1207A CONFIGURABLE DISTRIBUTION

- Input Frequencies 500kHz to 50MHz
- 100 MHz Option Available
- 12 Broadband Outputs
- Low Additive Phase Noise
- Isolation (>100dB typical)
- Buffered Outputs
- Minimum Skew & Propagation Delay
- Pulse and IRIG DCLS
- Superior IRIG-B Signal Distribution
- High Channel Isolation
- Available in 1U & 2U , 19" rack mount package
- Low Cost

The **ptf** 1206A (1U) & **ptf** 1207A (2U) provide the flexibility of distributing a variety of signals from one highly configurable box.

With **ptf's quad-bloc** distribution cards you can build a system that is tailored to your specific needs. Based on the **ptf** family of Distribution products, **ptf quad-blocs** are available for Broadband RF, Digital Pulse and Modulated IRIG distribution. Dual input A/B autoswitching capabilities are also available as an option.



The **ptf Broadband RF Distribution** provides high performance frequency references for laboratory or system use.

In most applications the phase noise capability of the **ptf** Broadband RF Distribution will out perform the input signal performance to such a degree that no additive phase noise will be noticeable on the outputs.

Isolation output to output is ~100 dB and harmonics are <-40 dB.

The **ptf Digital Signal Distribution** is a flexible platform used for distribution of various pulse formats (ex.

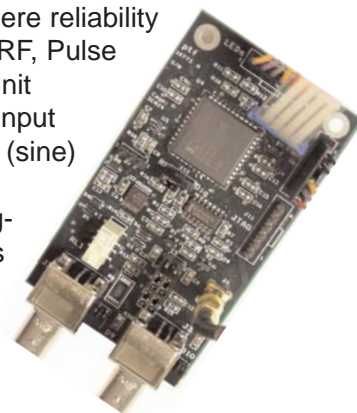


1 PPS, 1 PPM, 10 PPM, etc). The **ptf** Digital Signal Distribution will also distribute digital timing signals such as IRIG-B DCLS format.

Through decades of timing design experience, the **ptf** team is able to reproduce precision pulse input signals with the minimum of propagation delays, with two stages of input signal buffering to distribute the input signal to 12 separate outputs and insure maximum isolation between individual output signals.

The **ptf Modulated IRIG Distribution** uses at its heart a broadband design combining the latest technology in low noise components, to distribute modulated IRIG signal input to provide separate outputs.

The **ptf Auto Switch** is purpose designed for time and frequency applications where reliability criteria call for redundant RF, Pulse and timing sources. The unit accepts a pre-configured input consisting of either an RF (sine) signal, a pulse (typically 1 PPS), or Timing (IRIG) signals. The primary signal is monitored and automatically switches to the backup channel within ~ 3msec (typical).



Specifications subject to change without notice



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## SPECIFICATIONS

### ELECTRICAL

#### RF DISTRIBUTION SPECIFICATIONS

##### Output

Frequency Range	500kHz to 50MHz 1 kHz - 20 MHz (optional)
Level	1V rms (nominal)
Harmonic Distortion	<-40 dB
Non-Harmonic Signals	<-80 dB
Load Impedance	50Ω
Isolation	>90 dB*
Connectors	BNC

\*Isolation alternating channels >100 dB, up to 30MHz

##### Additive SSB Phase Noise

(1 Hz Bandwidth) Offset from 10MHz

1 Hz	-120 dB
10 Hz	-135 dB
100 Hz	-145 dB
1,000 Hz	-155 dB
10,000 Hz	-160 dB

##### RF Input

Frequency Range	500kHz to 50MHz 1 kHz - 20 MHz (optional)
Level	1 V rms (nominal)

##### Alarm Output

Summary alarm indicates failure of any output signal	
Non-alarm condition:	Relay energized (fail safe)
Connector:	9 pin D-male

#### DIGITAL DISTRIBUTION SPECIFICATIONS

Input Level	10V max (0-5V nominal)
Output Level	0 - 5V
Output Impedance	50Ω
Load Impedance	50Ω
Frequency Range	50MHz maximum
Rise Time	<2ns
Ch to Ch Skew	<5ns (multi-cards), <1ns (1 card)

#### MODULATED IRIG DISTRIBUTION SPECIFICATIONS

##### Time Code Input/Output

Code Format	IRIG A,B,D,E,G & H
Modulation Frequency	1kHz to 1MHz
Modulation Ratio	3:1
Amplitude	≤6V P-P into 50Ω 50Ω source impedance
Connectors	BNC
Impedance	50Ω/Hi Z switch (50KΩ)

#### AUTOSWITCH SPECIFICATIONS

Switching Time	<3 milli seconds (typical)
Type	Relays (Failsafe) Break before Make
Switch Control	Auto/Remote/Local

##### Controls & Indicators

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

#### ENVIRONMENTAL & PHYSICAL

Temperature:	0° to 55° C
Relative Humidity:	0 to 95%, non-condensing
Power Requirements	
AC Input (±15%)	90 - 264 VAC, <10W
DC Input (optional)	
Dimensions (HxWxD):	1U x 19" x 12"

##### Configuration Options

Option #	Description
RF10	1MHz to 10MHz Sinewave out (x4)
RF100	100MHz Sinewave out (x4)
TIME	Time Code Output
PULS	Pulse Distribution (x4)
TELC	T1/E1 Distribution (x4)
AUTO	Auto Switch (Digital, Irig, or RF)
DCPS	DC Power Supply
RSLD	Mounted Rackslides



1207A rear view (w/multiple options)



1206A rear view (w/multiple options)

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