

Rapco 2804 Series -- High-specification GPS Master Clock

- THE DEFINITIVE TIMING SOLUTION FOR SATELLITE GROUND-STATION AND SIMILAR ADVANCED TELECOMMUNICATIONS APPLICATIONS.
- MORE FUNCTIONALITY FOR RACK SPACE SAVING AND COST EFFECTIVENESS.
- FROM GPS RECEIVER TO TIME DISPLAY OUTPUTS IN ONE BOX.



These units have a high-quality Vacuum Fluorescent alphanumerical front-panel display, more manual control features and extensive built-in-test (BIT) facilities. State-of-the-art reference oscillators in both Quartz and Rubidium versions, offer improved stability and accuracy compared with earlier generation products along with higher levels of stand-alone stability during hold-over.

FREQUENCY OUTPUTS		
Reference Frequency	10 MHz Standard. Other fixed frequencies or synthesised outputs available as options.	
Outputs available	Sinewave, TTL (All on BNC)	
Amplitude, Sine outputs	+10dBm in 50 ohm. factory setting, (+7 to +13dB available)	
Amplitude, TTL outputs	>+4V o/c, >+2.4V into 50 ohm	
FREQUENCY ACCURACY 7 days min. continuous power up and GPS. Averaging Period 24 hours min. Temperature Quasi-Constant, Range 26°C ± 10°C		
	Quartz Oscillator (2804A)	Rubidium Oscillator (2804AR)
Absolute Frequency Error, Ref: USNO	±5E-11	±3E-12
Short Term Stability (Allan Variance 1 sec)	1E-12	3E-12
REFERENCE stand alone performance (without GPS)		
Long Term Stability (drift rate, ageing)	±1E-10/day	<3E-11/month
Frequency vs Temperature (20°C ± 20°C)	±1E- 9	±2E-10
Phase Noise dBc/Hz @ 1 KHz offset	-145 typ	-135 typ
TEMPERATURE RANGE		
	Rack Mount Unit	Aerial Assembly
Operating	0 to +50°C RH 90% (non-cond.)	-40 to +70°C RH100%
Storage	-40 to +70°C RH 30%	-55 to +85°C RH 30%
TIMING OUTPUT		
	Square wave, +ve edge on-time 1Hz, derived from the internal drift-corrected oscillator and phase-locked to the average position of the GPS 1pps (UTC).	
Number of Outputs	1 x BNC	
Signal Level	TTL >+4V o/c, >+2.4V into 50 ohm	
Accuracy (uncalibrated)	Leading edge on-time to UTC to within ±1 microsecond or with site-specific set-up ±300nS	
TIMECODE OUTPUT		
	User selectable code	
Number of Outputs	2 x BNC standard. 4off with option fitted.	

C			
F			
T			

X denotes incompatible. *See notes above