

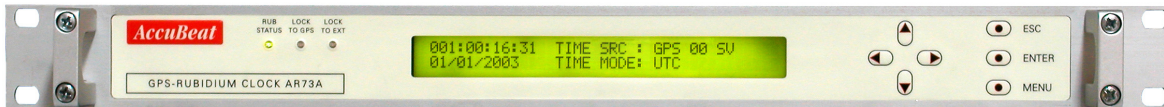
GPS-Disciplined OCXO Clock

AR73A-16-07

Industrial/Semi Military

Key Features

- ❖ Frequency Accuracy : 1E-11
- ❖ 1PPS Accuracy: 100ns RMS relative to GPS
- ❖ Outputs: 3x10MHz, 3x1PPS (TTL/50Ω), RS232, 1PPS, IRIG-B (Opt)
- ❖ Inputs: 1 PPS , IRIG-B (Opt)
- ❖ Network Time Server: LAN - NTP
- ❖ UTC/GPS Time Source
- ❖ Delay Correction for Input & Output
- ❖ Display of Time, Date, Status & BIT
- ❖ RS232 Remote control
- ❖ Supply Voltage: 90/260 VAC
- ❖ Graphic User Interface (GUI) Software for PC (opt.)



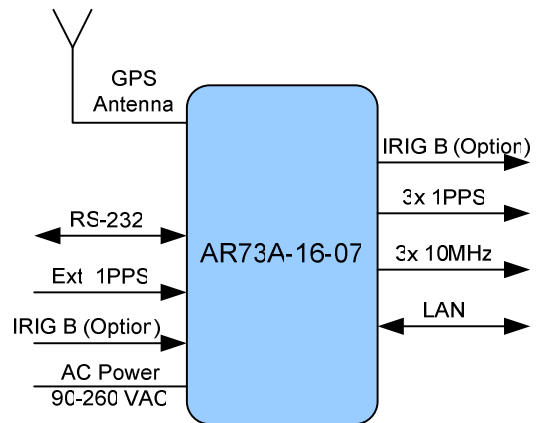
Applications

- ❖ Test Equipment
- ❖ Scientific Equipment
- ❖ Calibration
- ❖ Telecommunication
- ❖ Secure Communication
- ❖ TV Stations
- ❖ Cellular Base Stations
- ❖ Mobile Radio Base Stations
- ❖ Internet

SPECIFICATIONS

All specs are at room temperature, quiescent conditions, sea level ambient unless otherwise specified

Input & Outputs	
Outputs	3 x 10MHz sine wave, 5±2dBm/ 50Ω 3 x 1PPS (TTL/50Ω) LAN - NTP IRIG-B (Option)
Input	GPS Antenna / 50Ω 1PPS / 50Ω IRIG-B (Option) Manual setting of data via display keypad or via PC (RS232) Inputs Priorities for synchronization: (1) 1 PPS, (2) IRIG-B (Option), (3) GPS
Monitor & Control	RS-232 , PC channel for data remote control



Performance		
Mode of work:	Disciplined to GPS or to Ext. 1PPS OCXO-Standard	
Time (1PPS)	Long- term accuracy	100ns RMS relative to GPS or Ext. input @ 25°C without S/A
Frequency	Accuracy	1E-11 after warm-up, 24 hours averaging at constant temperature
		≤-95dBc/Hz @ 10Hz ≤-127dBc/Hz @ 100Hz ≤-137dBc/Hz @ 1KHz ≤-142dBc/Hz @ 10KHz
	Harmonics (10MHz)	≤-48dBc
	Spurious (10MHz)	≤-75dBc ±100KHz
	Warm-up	60 min for ≤2E-9

Environmental	
Operating Temperature	-10 °C to +55 °C for AR73A-16 unit -20 °C to +70 °C for antenna
Storage Temperature	-20 °C to +70 °C for AR73A-16 unit -40 °C to +70 °C for antenna
Humidity	Up to 95% at 35 °C, non-condensed for AR73A-16 unit Up to 100% condensing, fully outdoor for antenna
Vibration (non-operating)	MIL-STD-810D, Method 514.3 (2.5g RMS, 5-500Hz) & RTCA/D0 160D Section 8.7.2, Table 8-1, Figure 8-1, Curve B
Shock	MIL-STD-810C, Method 516.2, Proc. I (7.5g / 30ms / Half sine) & RTCA/D0-160D Section 7, Paragraph 7.3.1 (15g/11ms)

GPS Receiver	
GPS Tracking	L1 frequency 1575 MHz C/A code (SPS) 8 parallel tracking channels
GPS Position	Latitude, Altitude, longitude
Position Accuracy	<6m CEP (50%) w/o SA
GPS Antenna DC Voltage	5VDC, supplied by the unit

BIT and GUI			
LED Indications	3 LEDs on the front panel: Power, Status, Lock to GPS, Lock to Ext		
Graphic User Interface (GUI) Software for PC	<table style="width: 100%; border: none;"> <tr> <td style="border: none; vertical-align: top;"> <ul style="list-style-type: none"> ○ Time/date display ○ Time source ○ Time zone ○ Satellites in view ○ Navigation data from GPS ○ Leap seconds (from UTC to GPS) ○ BIT (Built In Test) </td> <td style="border: none; vertical-align: top;"> <ul style="list-style-type: none"> ○ Antenna Cable delay ○ Ext Input Delay ○ 1PPS output delay ○ Comm. Parameters ○ Daylight Saving/ STD ○ Time Setting GPS/UTC/LOCAL ○ Additional parameters </td> </tr> </table>	<ul style="list-style-type: none"> ○ Time/date display ○ Time source ○ Time zone ○ Satellites in view ○ Navigation data from GPS ○ Leap seconds (from UTC to GPS) ○ BIT (Built In Test) 	<ul style="list-style-type: none"> ○ Antenna Cable delay ○ Ext Input Delay ○ 1PPS output delay ○ Comm. Parameters ○ Daylight Saving/ STD ○ Time Setting GPS/UTC/LOCAL ○ Additional parameters
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SPECIFICATIONS *(continue)*

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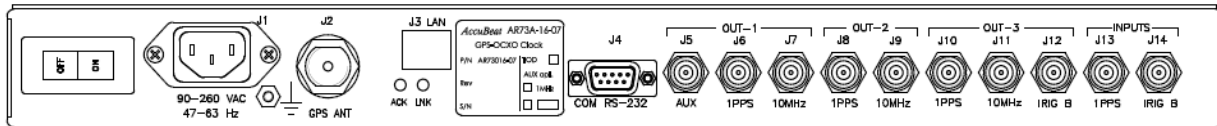
Power Supply

AC	90/260 VAC 47/63 Hz
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Dimensions & Weight

19" x 1U Rack Mount	Size	19" X 1U (1.75") X 16"
	Weight	< 4kg

Mechanical ICD



HOW TO ORDER

Product Name	Description	AccuBeat Part No.
AR73A-16-07	GPS-Disciplined OCXO Clock	AR73016-07

ACCESSORIES	AccuBeat P/N:
GPS Antenna 26 dB	EM30018
GPS Antenna 36 dB	EM30039
Antenna Cable RG-142 5m	AA50204
Antenna Cable RG-213 25m	AC50501
GUI Software for PC for Remote Control	SW50010

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