

PRECISION TIMING

XHTF1012LN Low Phase Rubidium Atomic Clock

The XHTF1012LN Low Phase Rubidium Atomic Clock offers ultra-low phase noise and high short-term frequency stability, making it ideal for precision applications in radar, communication systems, and scientific research.

Overview

The **XHTF1012LN Low Phase Rubidium Atomic Clock** is designed for precision applications that require ultra-low phase noise and exceptional short-term frequency stability. Its high-performance features make it suitable for radar, communication systems, and other critical applications. For inquiries, please [contact us](#).

Features

- Ultra-low phase noise for high precision.
- High short-term frequency stability.
- RS-232C communication interface.
- 1PPS synchronization and quick disciplining.
- Low power consumption with minimal steady-state voltage requirements.
- Reliable performance in military and scientific environments.

Applications

- **Radar systems** requiring high frequency accuracy and low phase noise.
- **Communication systems** for precision synchronization and timekeeping.
- **Scientific research** requiring ultra-low phase noise and stable frequency sources.
- **Military applications** where high stability and reliability are critical.

Main Specifications

Core Specifications

Specification		Typical	High performance
Phase Noise (SSB)	@1Hz	<-100dBc/Hz	<-105dBc/Hz
	@10Hz	<-130dBc/Hz	<-135dBc/Hz
	@100Hz	<-140dBc/Hz	<-150dBc/Hz
	@1KHz	<-150dBc/Hz	<-155dBc/Hz
	@10KHz	<-155dBc/Hz	<-160dBc/Hz
	@100KHz	<-157dBc/Hz	<-162dBc/Hz

Pin Connection Details

Pin Number	Function	Pin Number	Function
1	+24V	9	N/A
2	+24V	10	1PPS output
3	GND	11	N/A
4	GND	12	N/A
5	RXD	13	N/A

Pin Number	Function	Pin Number	Function
6	TXD	14	N/A
7	1PPS input	15	N/A
8	Lock status	—	

Connector	Signal
J1:DB-15	—
J2:SMA	1PPS input
J3:SMA	1PPS output
J4:SMA	10MHz sine wave output