

# GPS Ref Oscillators for Transmitters

## Specifications

Frequency  
10MHz

Frequency Stability  
When locked to Satellite  
<math>\pm 3 \times 10^{-12}</math>

Frequency Stability  
When without GPS lock four hours  
<math>\pm 2 \times 10^{-10}</math>

Phase Noise Typical  
100Hz <math>< -120</math>dBc 1KHz <math>< -140</math>dbc

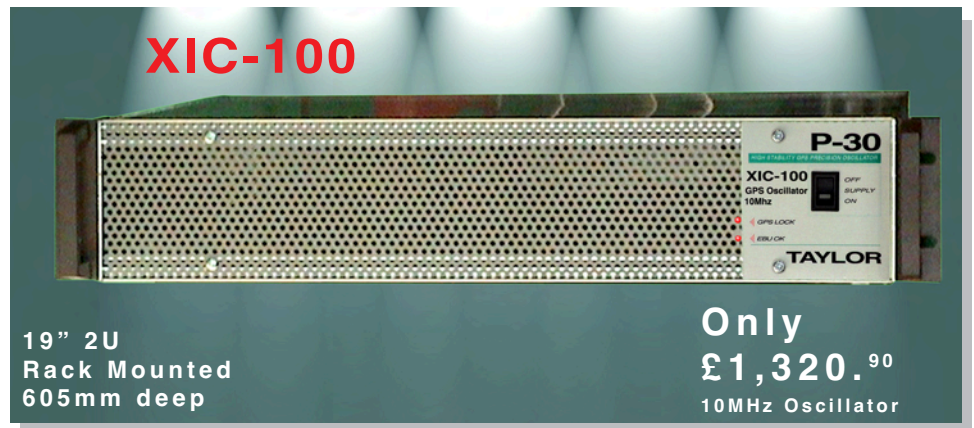
Outputs  
Sinewave and TTL

Start Up Time  
20 mins

GPS locked Indicator

Operating Temperature  
0 deg C to 40 deg C

Power 220V AC  
120V available opt A



The XIC-100 is a high performance GPS locked precision oscillator for transmitters and test instruments requiring a very accurate timing source .

In particular for providing a reference for multiple transmitters for single frequency operation(SFN).

This will free up very large amounts of valuable UHF spectrum that can be utilized for other TV transmissions or

### WiMAX

WiMAX is one of the most cost effect way of providing broadband internet and can reduce by a very large amount the capital cost of installing internet in rural areas.

Freeing up spectrum by utilizing SFN for TV DVB-T broadcasts provides real value for consumers.

The unit tracks up to eight satellites and provides a accuracy of  $\pm 3 \times 10^{-12}$ .

The internal oven oscillator is constantly calibrated to the UTC-GPS reference broadcast by GPS satellites worldwide. In the event of GPS signal loss after 4hours the accuracy of the oscillator is  $\pm 2 \times 10^{-10}$

The **XIC-101** is an oscillator with a low phase noise output. Available any frequency from **1uHz to 30Mhz** in 1uHz steps .

**Specify frequency when ordering.**  
Price

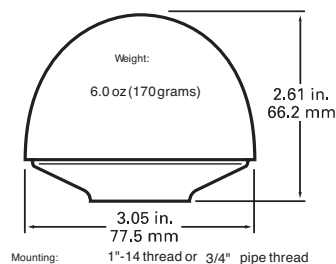
XIC-100	£1,320. <sup>90</sup>
XIC-101	£1,802. <sup>50</sup>

**Connectors**  
Input F 75 ohm  
outputs BNC

# GPS Antenna TIC-100

## SPECIFICATIONS

Primepower: +5 Vblts DC ( $\pm 10\%$ )  
Powerconsumption: 30 mA maximum  
Outputimpedance: 50W  
Frequency: 1575.42MHz  $\pm 1.023$ MHz  
Polarization: Right-hand circular polarization (RHCP)  
VSWR: 2.0 maximum  
Axialratio: 90°:4.0 dB maximum;10°:6 dB maximum  
Gain: 35 dB  $\pm 3$  dB  
Noise: 3.3dB maximum(25°C $\pm 5^\circ$ C)  
Pass-bandwidth: 50 MHz  
Out of Bandrejection:  $f_0$ : 1575.42MHz  
 $f_0 \pm 20$  MHz : 7dB min  
 $f_0 \pm 30$  MHz : 12dB min  
 $f_0 \pm 40$  MHz : 20dB min  
 $f_0 \pm 100$  MHz : 100dB min  
Azimuthcoverage: 360° (omni-directional)  
Elevationcoverage: 0° to 90° elevation(hemispherical)  
Operatingtemp: -40°C to +85° C  
Shock: 50 g vertical, 30 g all axes  
Humidity: Mil-STD-810E  
Corrosion: 5% Salt spray  
Waterproof: Immersion to 1 meter/connector sealed



## CONNECTORS



F-type



TIC-100 Price £84.<sup>51</sup>

Specifications are typical and subject to change without notice.