

Wintron is specialized in developing and producing customized MIL Application - Radar Oscillators and Synthesizers products in cooperation with numerous Military American and European companies and organizations.

Our product range includes Fast Hopping Low Phase Noise Synthesizers, DDS Driven FM CW Radar, Fake Signal Insertion Radar, Multi Carrier Transponders etc.

Due to their military applications, most of our products only have to comply with the American and European export control regulations

### Contents:

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[2.Redundancy Switch / Redundancy Controller](#)

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[Satellite Converter](#)

[Satellite Upconverter](#)

[Satellite Downconverter](#)

[Dual Band Satellite Upconverter](#)

[Dual Band Satellite Downconverter](#)

[Triple Band Satellite Upconverter](#)

[Triple Band Satellite Downconverter](#)

[Satellite Up- / Downconverter for hostile environments](#)

[Dual Channel Satellite Downconverter](#)

[Shared Oscillator Satellite Downconverter](#)

[Monopuls Satellite Tracking Receivers](#)

[Inmarsat Downconverter](#)

[Narrowband Downconverter](#)

[L-Band Inmarsat Downconverter](#)

[Synthesized L-Band Satellite Block Upconverter](#)

[Synthesized L-Band Satellite Block Downconverter](#)

[L-Band Satellite Block Upconverter](#)

[Satellite Block Upconverter](#)

[mini-buc® Satellite Upconverter](#)

[mini-buc® Satellite Downconverter](#)

[DVB-S/S2 Modulator Upconverter](#)

[Satellite Converter Remote Control Unit](#)

[Satellite Uplink Power Control Unit](#)

[Satellite Converter Automatic Level Control \(ALC\)](#)



Satellite Redundancy Switch  
 Satellite Redundancy Controller

[Satellite Redundancy Switch / Redundancy Controller 1 : 1](#)

[Satellite Redundancy Switch / Redundancy Controller N : 1](#)

[Satellite Redundancy Switch N : 1](#)



**SATCOM PRODUCTS**

- [Satellite Up- Converter / Down- Converter](#) Indoor  
 Single, Dual and Triple Band ( S, C, X, Ku, K, Ka Band)
- [DVB-S / DVB-S2 Modulator-Up- Converter](#) Indoor  
 C, X, Ku, K Band DVB-S / DVB-S2
- [Dual Channel Shared Oscillator Down- Converter](#)  
 for Monopuls Tracking Receivers
- [Inmarsat / Narrowband Down- Converter](#)  
 L-Band Inmarsat to 70/140 MHz
- [Synthesized L-Band Block Up- and Down- Converter](#)  
 S, C, X, Ku, K-, Ka-Band
- [Satellite Block Up- Converter \(mini-buc®\)](#)  
 Single, Dual, Tri Band Block Up- Converter L Band to C, X, Ku Band
- [L-Band Block Converter](#)  
 L Band to C, X, Ku Band
- [Satellite Converter Remote Control Unit](#)  
 Satellite Uplink Power Control Unit
- [Satellite Converter Automatic Level Control \(ALC\)](#)  
 with Filter Amplifier



[DVB-S2 Modulator, DVB-S2 Demodulator,](#)

[DVB-S2 Modems](#)

[DVB-S2 Modulator](#)

[DVB-S2 Demodulator](#)

[DVB-S2 Modulator / Upconverter](#)

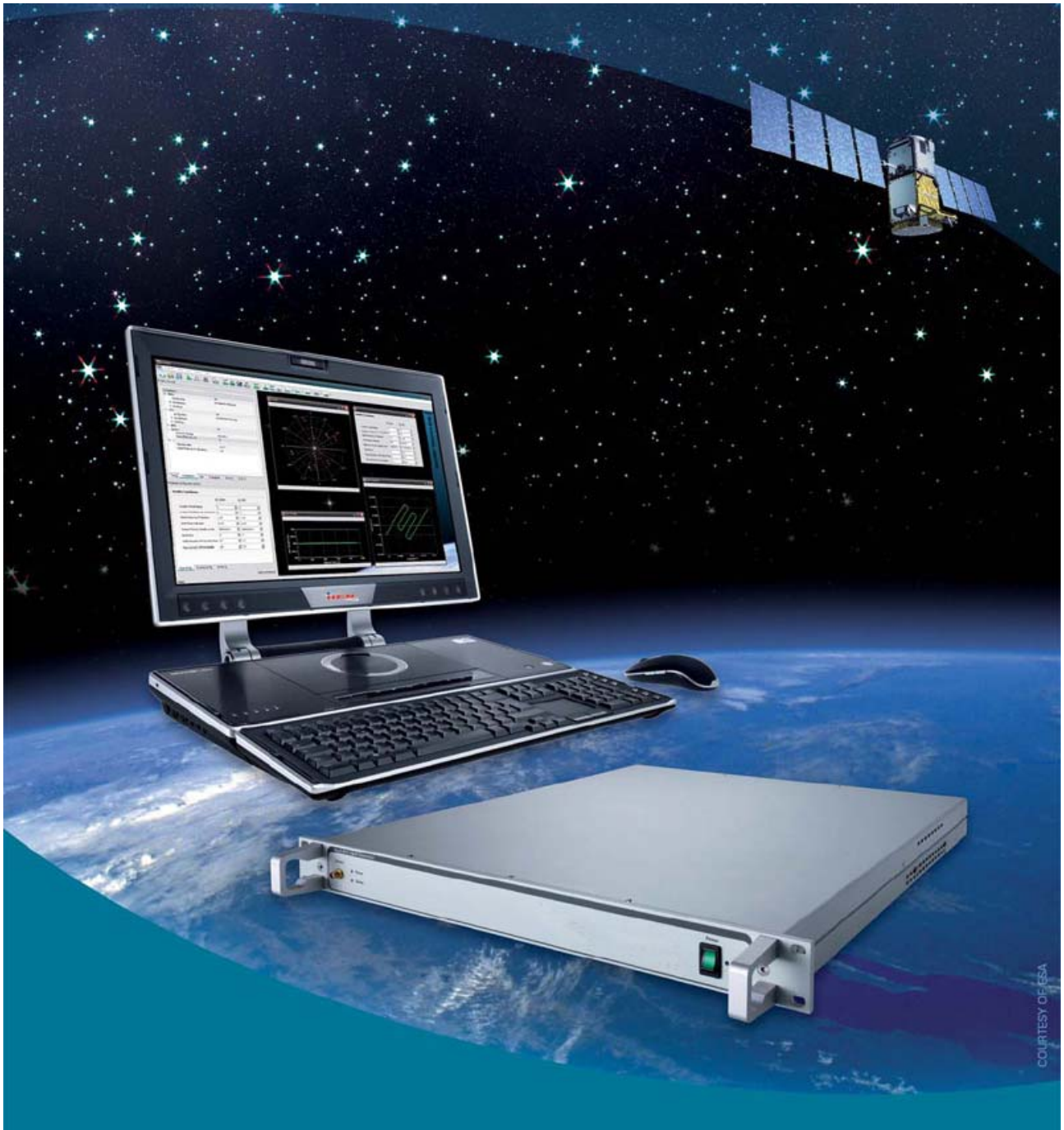
[DVB-S2 Modem available 1st/4t 2009](#)



- [Satellite Up- Converter / Down- Converter](#)    **Indoor**  
Single, Dual and Triple Band ( S, C, X, Ku, K, Ka Band)
- [Satellite Up- Converter / Down- Converter](#)    **Outdoor**  
Single, Dual and Triple Band ( S, C, X, Ku, K, Ka Band)
- [DVB-S / DVB-S2 Modulator-Up- Converter](#)    **Indoor**  
C, X, Ku, K Band DVB-S / DVB-S2
- [Dual Channel Shared Oscillator Down- Converter](#)  
for Monopuls Tracking Receivers
- [Inmarsat / Narrowband Down- Converter](#)  
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- [Satellite Converter Automatic Level Control \(ALC\)](#)  
with Filter Amplifier



Satellite Navigation Simulator





## 5. Radar Synthesizer

### Radar Synthesizers ( 1 - 24 GHz )

- Fast Hopping Synthesizers
- Very Low Phase Noise Synthesizers



### Radar Front End ( 1.2 - 24 GHz )

- Analog Radar
- DDS Driven FM CW Radar



### ECM Equipment ( 1 - 40 GHz )

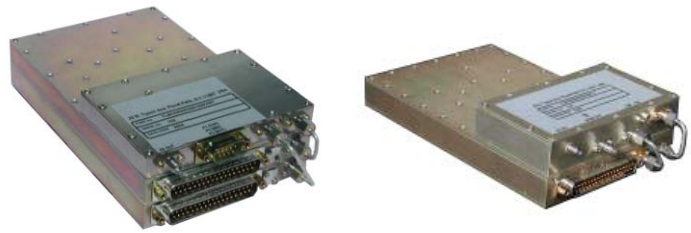
- Fake Signal Insertion Radar
- Multi Carrier Transponders\_



6.ECM Equipment

Radar Synthesizers ( 1 - 24 GHz )

- Fast Hopping Synthesizers
- Very Low Phase Noise Synthesizers



Radar Front End ( 1.2 - 24 GHz )

- Analog Radar
- DDS Driven FM CW Radar



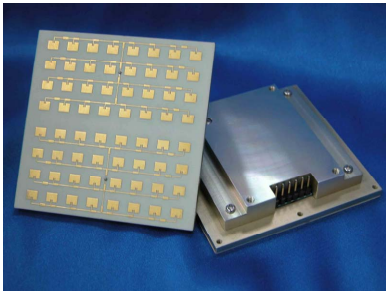
ECM Equipment ( 1 - 40 GHz )

- Fake Signal Insertion Radar
- Multi Carrier Transponders



**Microwave Sensor System**

A microwave sensor system of the present invention to achieve the above object comprises a plurality of sensors each having a different phase that transmit microwaves toward a detection area and that receive microwaves reflected from the detection area; a determination unit that determines whether or not the microwaves have been received by the sensors; and a measurement unit that computes the respective phase differences of the microwaves received by the a plurality of sensors when the determination unit has verified reception of the microwaves and computes the distance from the sensors to a target serving as a detection target within the detection area. The measurement unit measures detection error on the basis of the computed phase difference, the computed distance and a preset frequency difference. The measurement by the measurement unit includes detection error resulting from the presence of moisture such as rainfall in the air between the sensors and the target, detection error that the system has, and detection error obtained by adding these detection errors together. The detection error resulting from moisture sharply increases as the preset frequency difference becomes larger and the detection error that the system has



Df\_Microwave\_Sensor\_Module



Hb\_Series\_Microwave\_Sensor\_Module



Microwave\_Sensor\_Modulle



Lb\_200\_Microwave\_Sensor\_Module



**RF Generators**

<u>Type</u>	<u>Frequency Range</u>
<u>SSG2 / SSG2M</u>	<u>0.01 - 1315 MHz</u>
<u>SSG3 / SSG3M</u>	<u>0.01 - 2630 MHz</u>



**Microwave Generators**

<u>Type</u>	<u>Frequency Range</u>
<u>SSG6</u>	<u>4.0 - 6.0 GHz</u>
<u>SSG7</u>	<u>5.0 - 7.0 GHz</u>
<u>SSG8</u>	<u>6.0 - 8.0 GHz</u>
<u>SSG10</u>	<u>8.0 - 10.0 GHz</u>
<u>SSG12</u>	<u>10.0 - 12.5 GHz</u>
<u>SSG14</u>	<u>12.0 - 14.5 GHz</u>
<u>SSG16</u>	<u>14.0 - 16.5 GHz</u>
<u>SSG18</u>	<u>16.0 - 18.5 GHz</u>
<u>SSG20</u>	<u>18.0 - 20.0 GHz</u>
<u>SSG22</u>	<u>20.0 - 22.0 GHz</u>
<u>SSG24</u>	<u>23.0 - 25.0 GHz</u>



**Multi Carrier Generators**

<u>Type</u>	<u>Frequency Range</u>
<u>MCG2</u>	<u>5 - 2630 MHz</u>
<u>MCG6</u>	<u>5 - 2630 MHz</u>

