**DUCOMMUN TECHNOLOGIES THAILAND** 

# RF Microwave Switches Doppler Sensor Heads Wire Harnesses



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MADE IN THAILAND





Ducommun Technologies established our Thailand facility in 2006 and began production in 2007. Our initial production was in support of Ducommun's commercial microwave coaxial switches to serve a growing demand from the cable modem, telecommunications and test equipment market segments. In rapid order Thailand's manufacturing capability quickly expanded to include millimeter wave oscillators and sensor products and then into cable harness assemblies.

Ducommun Thailand is located in Saraburi, which is a province in the upper central region of Thailand and is rich in tourist attractions including natural sites, artifacts, festivals, temples and other historical sites. Saraburi also has several manufacturing companies along with a Thailand Air Force Base. Saraburi is about 108 kilometers north of Bangkok.

#### **Our Capabilities:**

#### **Engineering Services**

- Dedicated Design Team for each Product Line
- State of the Art CAD Workstations
- Full CAD/CAM Software Suite w/ 3D Modeling
- Structural and Thermal Analysis

#### Manufacturing

- Conversion Coat Chemical Processing
- Material and Component Traceability
- Sheet Metal Processes
- Paint Booth

#### **Assembly**

- Certified J-STD Solderers
- ESD Protected Electronic Assembly Stations
- Three Assembly Centers in 15,000 SF
- Environmentally Controlled Work Environment with Class 100 Flow Benches
- Certified Operators for Special Processes and Assemblies

#### Test

- RF Spectrum Analyzers
- Automated DC and Digital Test Sets
- Life Tests and Environmental Stress Screening
- VNARF Testing

# RF Microwave Switches



#### Features:

- SPDT, Multi Position and Transfer Switches
- Frequency range DC to 26.5 GHz
- 1,000,000 cycles
- RF Impedance 50 Ohm and 75 Ohm nominal
- Switching Time 15 mSec max
- Available in Failsafe and Latching
- Compact Size
- RoHS Compliant
- Low Cost and Volume Production

#### **Applications:**

- Telecommunications
- Test Equipment

Ducommun Thailand delivers a broad range of microwave products that are used in test equipment and commercial applications. Many of these products are available in stock. We also manufacture custom-designed products for your unique needs.



#### Features:

- High Sensitivity
- Low 1/f Noise
- Circular Polarized Waveform
- Low Harmonic and Spurious Emission
- Temperature and Vibration Qualified
- Compact Size
- Low Cost and Volume Production

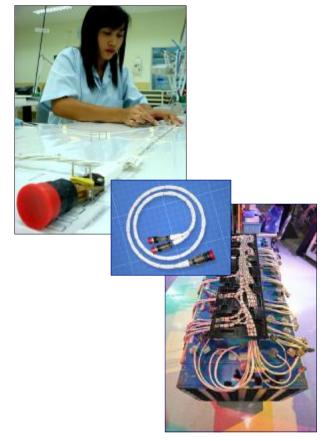
#### **Applications:**

- Automotive Radar
- Doppler Radar

SRF series Single and Dual Channel Doppler Sensor Heads are designed for long range motion/speed/ directional detection where the sensitivity is essential. The sensors are constructed with a high performance horn antenna or horn-lens antenna, a linear to circular polarizer and T/R diplexer, a balanced mixer (I/Q mixer for dual channel version) and a high performance Gunn diode oscillator or dielectric resonator oscillator/ multiplier chain. The low 1/f noise mixer diodes and high performance oscillator enhance Doppler detection at low IF frequency and circular polarized waveform improves reception ability for various Radar targets. The sensors are offered with single or dual channel version. The dual channel version provides target moving direction (approaching and receding) information of the target while detecting speed.

Standard products are offered at 24 GHz and 35 GHz, with other frequency bands are available upon request.

## Wire Harnesses



#### Features:

- IPC / WHMA-A-620 Certified
- Cable and Wire Harness Certification
- J-STD-001D CIT (Trainer)
- J-STD-001D Certified Operators
- Low Cost and Volume Production
- Cage Code SDQ80

### **Applications:**

• Boeing 787 Wire Harness

Our Thailand location houses a wire systems facility that specializes in complex harnesses, cabling and electronic assembly. Automatic Test Equipment capable of continuity and leakage tests per customer's requirements

> DITMCO FACT 8010 12,000 Test Points

# About Us

Founded in 1849, Ducommun Incorporated provides engineering and manufacturing services for the aerospace and defense industry. A key part of the Ducommun family of businesses, Ducommun Technologies, Inc. is a leading technology company with design, development, manufacturing, integration and test capabilities in the area of complex electronics/mechanical assemblies; illuminated cockpit displays; motion control devices and RF to Millimeter Wave components, sub-assemblies and integrated products.

Ducommun Engineers can develop unique designs or design to customer specifications. Ducommun has a strong commitment to quality and is registered to ISO-9001 and AS-9100 standards.



