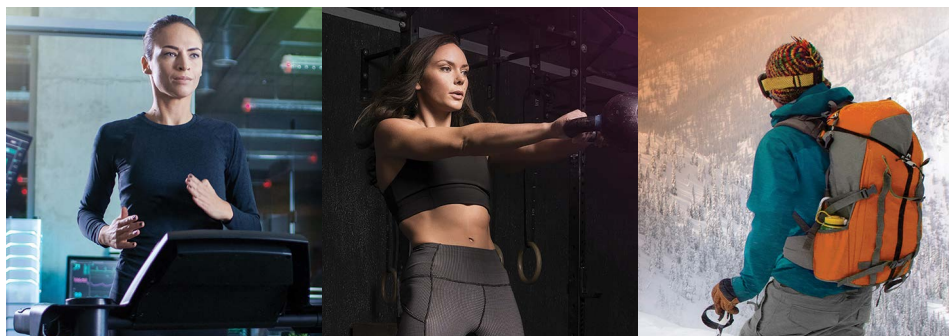
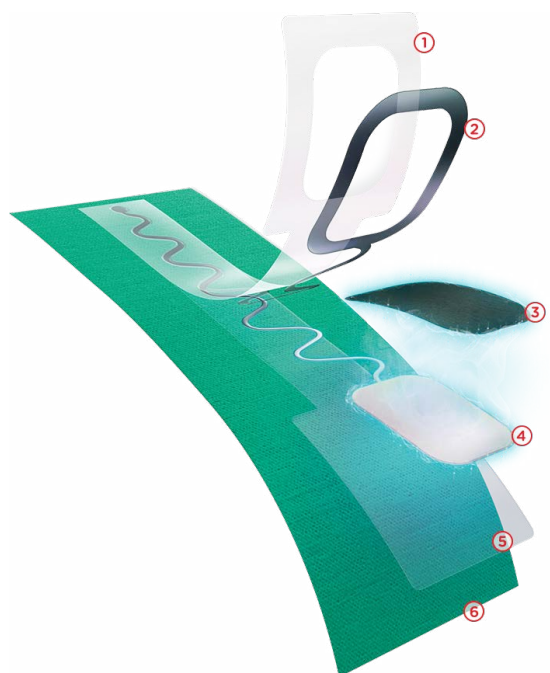


Create Higher Performance Textiles with Trusted Micromax™ Intexar™ Technology



Micromax™ Intexar™ technology integrates seamlessly into textiles for revolutionary health, fitness, and heated clothing applications. Specifically, Intexar™ inks and films transform materials into smart wearables; provide an effective way to sense and transmit biometric signals; and deliver heat. Plus, Intexar™ makes smart health devices and clothing easier to design, manufacture, and wear because the materials are:

- **Comfortable, soft, thin, and lightweight**—as well as compatible with existing high-performance fabrics and healthcare path materials
- **Manufacturing-ready**—Intexar™ materials work with standard textile lamination processes and can be cut to any shape
- **Functional**—Intexar™ maintains strong signal strength after repeated washing and can withstand up to 100 wash cycles



- 1. Cover film**
A protective layer shields the ink and film from exposure.
- 2. Encapsulant**
A thin, stretchable, and water-resistant layer.
- 3. Carbon overprint**
A thin layer of carbon or silver senses electrical currents and transmits data.
- 4. Conductor**
A layer of silver transmits electrical currents throughout.
- 5. Base film**
A Thermoplastic Polyurethane (TPU) laminate stretches for seamless integration with textiles.
- 6. Textile**
Most preferred textiles can be used.

Wearable Health Care

Manufacturer-ready, Intexar™ Health can be easily integrated into existing materials for skin patches and wearable clothing, providing smart wearable health care for use by consumers and medical professionals.

When placed directly on skin, Intexar™ can be used to detect the body's natural electrical signals for monitoring. Additionally, Intexar™ improves patient experience with peel-and-stick monitoring patches that stretch while maintaining conductivity.

Gentle on-body heating and mild electro-stimulation with Intexar™ delivers pain relief to specific areas.

Intexar™ Medical Grade Health Applications	
Telemetry & Monitoring	<ul style="list-style-type: none"> • Vital sign monitoring: Heart rate, ECG/EKG, EMG, EEG • Pregnancy and infant monitoring • Respiratory disorders
Therapy	<ul style="list-style-type: none"> • Heat • Transcutaneous electrical nerve stimulation (Tens)

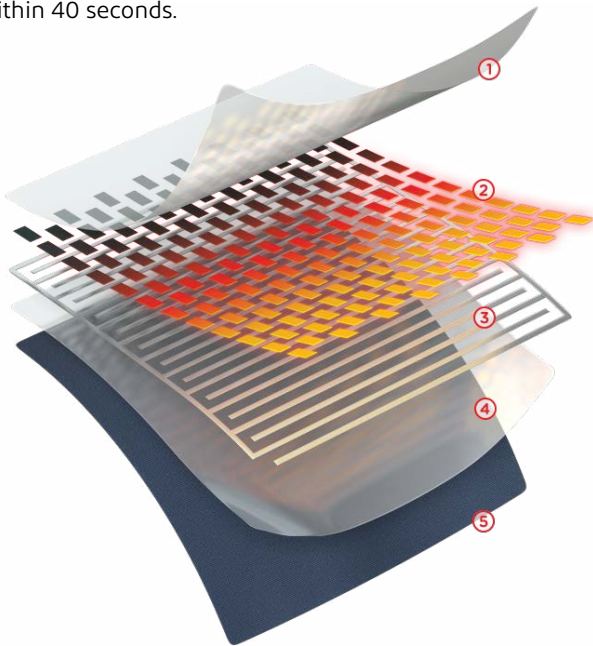
Smart Fitness Clothing

Light, stretchable, and seamless, Intexar™ Fitness is comfortable, wearable technology that enhances performance clothing. With Intexar™, athletes at all levels gain insights through biometric monitoring of pulse, breathing rate, muscle tension, and form.

Intexar™ Fitness Applications	
Athletics	<ul style="list-style-type: none"> • Professional, collegiate, amateur, and club • Indoor and outdoor
Training	<ul style="list-style-type: none"> • Calisthenics, weightlifting, and aerobics • Endurance • Recovery

Power-heated Outdoor Clothing

Thin, safe, and efficient, Micromax™ Intexar™ Heat conquers cold environments with powered heat for outdoor smart clothing by allowing temperature control and reaching operating temperatures within 40 seconds.



Intexar™ System Product Selector

Material	Product Number	Uses and Performance
Silver Conductor	PE874	Stretchable conductor for signal transfer • best stretch recovery
Silver Conductor	PE876	Stretchable conductor for signal transfer • best washability
Base Film	TE-11C	Polyurethane film designed for stretchable printed electronics • used for base film and cover layers
Adhesive Film	TE-21C	Melt adhesive film designed for part packaging • used to adhere to other fabric or layers
Encapsulant	PE773	Stretchable encapsulant for wearable applications
Carbon Resistor/ Overprint	PE671	Biopotential sensor and overprint
Carbon Resistor/ Overprint	PE672	Low PTC carbon for heater applications

For more information about Intexar™ textile technology, contact your Micromax™ representative.

Micromax™ is a leading brand of printable, stretchable, and moldable functional thick film inks, pastes and ceramic tapes. Micromax™ brand products are utilized for circuitry, interconnection and packaging of electronic devices in automotive, passive components, telecom, consumer electronics, healthcare and military applications featuring properties such as enhanced circuit density, improved thermal management, higher reliability and other critical functionality. Micromax™ represents over 60 years of experience in the development, manufacture and sale of specialized electronic materials, and offers leading global customer support and product quality and consistency.

<https://www.mobility-materials.com/brands/micromax.html>



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Intexar™ Heat Applications

Outdoor Enthusiasts	<ul style="list-style-type: none"> • Skiing, snowboarding, and mountain climbing • Hiking / trekking • Snowmobiling and motorcyclists • Sports fans • Hunting
Industry Professionals	<ul style="list-style-type: none"> • Utility, construction, and infrastructure • Military • Delivery • Forestry and mining

1. Cover film

A plain or customized protective layer shields the ink from exposure.

2. Carbon overprint

A thin layer of carbon radiates a controlled heat.

3. Conductor

A layer of silver transmits electrical currents throughout.

4. Base film

A Thermoplastic Polyurethane (TPU) laminate stretches for seamless integration with woven materials.

5. Fabric

Any preferred woven garment material can be used.

