



TRANSFORMING HEALTHCARE

WEARABLE MEDICAL DEVICES

Your goal is to help healthcare professionals improve the lives of their patients. In today's fast-paced world, patients need to be able to continue to live their lives while receiving treatment. The consumer trend has turned to wearables in recent years, and the medical device industry is no exception. By designing medical devices that can deliver lifesaving drugs, monitor dangerous heart arrhythmias, or even store and transmit patient body movement data, you're helping doctors and nurses improve the overall patient experience.

Wearable medical devices stay in contact with the body for extended periods of time, and as such, it is an important consideration when designing your device. Specific device requirements and regulatory protocols can

also present challenges during the part design process. We're here to help. Whether your device must use adhesives and meet certain skin-contact protocols, or needs to stand up to harsh disinfectants, aggressive drugs or sterilization procedures, we can help with a broad range of medical grade materials and a dedicated healthcare support team. Do you need to design a smaller, streamlined device that is comfortable and non-intrusive? Or perhaps you're looking to incorporate colorants that are FDA-approved for biocompatibility? PolyOne Distribution is prepared to help, from concept to marketplace and every step in between.



**MORE THAN
MATERIALS**

PolyOne[™]

PATIENT HEALTHCARE ON-THE-GO

Giving patients the option to take an easier and more comfortable path to health is appealing. Your cutting-edge wearable design could be the key to providing new alternatives to traditional doctor-patient interactions. By providing consistent monitoring, wearable devices can help doctors better predict and prevent or diagnose and treat health conditions such as cardiovascular diseases, diabetes, Alzheimer's and epilepsy. PolyOne Distribution can help you take your next idea and make it a reality.

TACTILE EXPERIENCE

Enhanced Ergonomics, Skin-Compatible
Comfort, Excellent Colorability

SOLUTION: Thermoplastic Elastomers (TPEs),
Thermoplastic Urethanes (TPUs), Silicone



DURABILITY

Impact Strength, Rigid or Flexible Materials

SOLUTION: Thermoplastic Elastomers (TPEs),
Thermoplastic Urethanes (TPUs), Copolyester,
Polycarbonate, PC Blends, PMMA, Styrenics,
Nylon (PA), Silicone

ERGONOMICS

Soft Touch, Easy to Grip
SOLUTION: Thermoplastic Elastomers (TPEs), Thermoplastic Urethanes (TPUs), Silicone

SURFACE PROTECTION

Performance Enhancing Additives
SOLUTION: Anti-Microbial Additives, Scratch and Mar Additives

MECHANICAL PERFORMANCE

Wear-Resistance
SOLUTION: Polyester (PET), Nylon (PA), Acetal (POM)

TOUGHNESS

Impact Strength, Chemical Resistance
SOLUTION: PC/Polyester Blends, Copolyester

FUNCTIONALITY

Impact Resistance, Dimensional Stability, Strength
SOLUTION: Copolyester, PC/Polyester Blends, Polycarbonate, Styrenics

AESTHETIC APPEAL

Metallic and Custom Effects, FDA-Approved Masterbatch Colorants
SOLUTION: Custom Polymer Colorants, Pre-Colored Resins

WEARABLE COMFORT

Flexibility, Skin-Compatible Comfort, Soft Touch
SOLUTION: Thermoplastic Elastomers (TPEs), Thermoplastic Urethanes (TPUs), Silicone



A GOOD FIT HEALTHCARE WEARABLE DEVICES



When you're ready to go from an idea to an innovative, life-changing device, we're here to help. From concept to marketplace, we can offer a comprehensive approach to product development designed to help you with design, the regulatory process, material selection and manufacturing support. But most importantly, we'll help you develop a device that improves patients' lives. Count on PolyOne Distribution to help you create wearable devices that make a difference.

Wearable Medical Devices for Improved Patient Experience

Examples include:

- Ambulatory Pumps & Monitors
- Glucose Monitoring & Insulin Dispensing
- Sleep Tracking Wearables
- Pain Management Wearables
- Mobile EKG Heart Monitors
- Mobility Analysis Wearables
- Blood Pressure Monitors
- Smart Sensor Patches
- Smart Clothing
- Wearable Defibrillators

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