

Technical data sheet

ANGEL React Shirt system

The system supports you in your daily work and gets help when you can no longer do it. Electrical accidents, motionlessness, and fall accidents are recognized using integrated sensors and an intelligent algorithm in the electronics unit. The electronic unit is attached to the ANGEL React T-Shirt. The Shirt has electrodes incorporated into the upper arm cuffs. The individual rescue chain is informed immediately – for fast and reliable help.

Who should wear an ANGEL React Shirt system?

- All lone workers
- All mobile workers
- People being exposed to the danger of an electrical accident

ANGEL React Shirt Genius

Weight: 33 g
Dimensions: 72 x 42 x 13 mm
Dimensions of Shirt Genius starter package: 350 g
Dimensions of Shirt Genius starter package: 300 x 210 x 35 mm
Charging: with ADRESYS charger only
Charging current: typical 140 mA
IP protection: IP 20
Humidity: 10 – 90 % rh
Lithium-Ion-Polymer battery: 0.88 Wh
Shirt Genius operating battery runtime: 12 h typical

Working conditions

Operation: -10 °C to 50 °C
Storage: -10 °C to 50 °C
Storage for optimal battery lifetime: 10 °C to 25 °C
Charging: 0 °C to 45 °C
Fast Charging: 10 °C to 40 °C
Limitation: Not authorized for people with cardiac pacemakers.

EMC standards

EN 55011 Group 1, Class B: Electromagnetic disturbance characteristics - Limits and methods of measurement

EN61326-1:2013: Electrical equipment for measurement, control and laboratory use – EMC requirements

EN300328 V2.2.2: Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz band

FCC 47 CFR Part 15: Federal Communications Commission (FCC) rules and regulations regarding unlicensed transmissions

EN62368-1:2015 + AC 2015 Audio/video, information and communication technology equipment – Part 1: Safety requirements

Contains FCC-ID: X8WBT840

Contains IC: 4100A-BT840

ANGEL React T-Shirt

T-Shirt material: 100 % eco cotton
Grammage: 150 g/m²
Cuff material: 92 % eco cotton, 8 % Lycra®
Grammage cuffs: 155 g/m²
Certificates of fabric: OEKO-TEX® STANDARD 100, PIMA®, ISO, bluesign®
Fabric shrinkage due to washing: maximum 8%
Electrodes: Electrically conductive silicone
Contact points: four stainless steel buttons

Care of ANGEL React T-Shirts

Spin cycle ≤ 1200 rpm. No industrial washing.



ANGEL React App

The ANGEL React App is the companion app for the ANGEL React Shirt Genius running on Android and iOS smartphones.

Supported operating systems: Android from 7.1.1, from iOS 14

System requirements: Bluetooth® LE (4.2 or higher), Location service (for example, GPS), Internet connection (for example, WiFi or 3G/LTE/5G).

The app needs to run permanently in the background. This increases battery usage of the phone. A permanent data connection is required for sending alarm messages and to communicate with the ANGEL React infrastructure services.

Infrastructure

Multi-redundant data infrastructure in European locations

Redundant alarm paths: ≥ 2

Non-redundant server for user registration

Registration is obligatory to use service

ANGEL React charging station

Weight: 50 g

Connection: USB-C

Supply voltage: +4 V to +5.5 V

Current continuous: 250 mA

Standby current when Shirt Genius is full: 35 mA

Standby current when no Shirt Genius is attached: 550 uA

Working conditions

Operation: 0 °C to 50 °C

Storage: -10 °C to 50 °C

Power supply

Device is OEM and potentially subject to change.

Input current: Only with power-limited power supply according to IEC61010-1 and IEC61010-2-201.

Connection: USB-A Euro or Ireland/UK power supply

Nominal voltage: 5 V +/- 10 percentage

Overvoltage category: OVC II

Protection level: IP 20

Protection Class: II, protective insulated connection

Voltage range: 100 – 240 Vrms/50 – 60 Hz Input