

ATP902 Washable conductive fabric & Smart Textile

Product Description

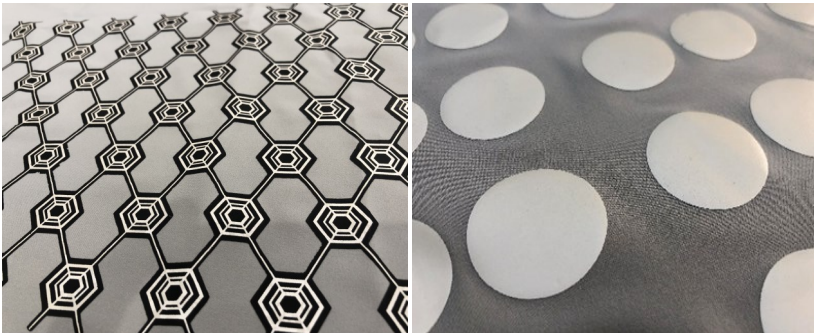
ATP902 Series conductive silver resin designed to produce printed electronic circuits on washable textiles. It can withstand standard machine washing and heating drying cycles. ATP902 conductive silver resin can be applied to different fabrics, providing new possibilities for smart textiles and facilities for many wearable printed electronic applications. ATP902 conductive Silver resin can be printed on PET Film by screen printing, and then transfer to synthetic fabrics. The textile become to washable.

Thermal transfer process. It does not require a dielectric package to ensure washability. These products are very flexible, wrinkle resistant, and have excellent adhesion to a variety of substrates. Applications include wearable electrodes, textile electrodes, biosensors, pressure sensors, heart rate monitoring, antennas, Actuator, and more.

Product Features

Soft, non-wearing, and physiological sensing are smart textiles needs.

Smart textiles need to be highly conductive to transmit physiological signals to the sensor elements, and their electrical conductivity comes from conductive textiles.



ATP902 conductive silver resin can be printed on synthetic fiber fabric by screen printing or thermal transfer printing method.



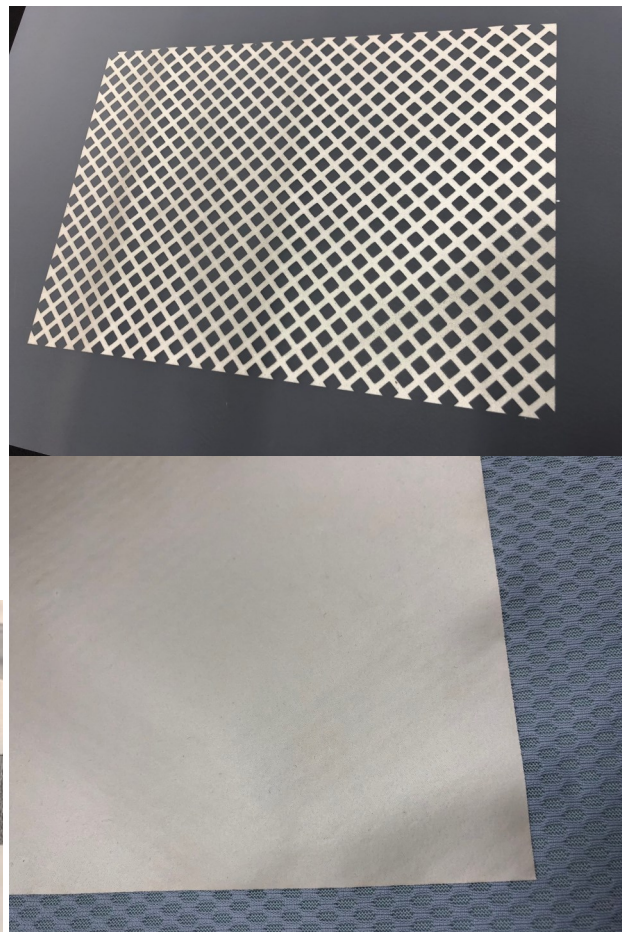
The left picture is the test sample.

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Can be Washable and dry cleaning.

Product Benefits

- Washable and dry cleaning
- Combine textiles with electronic functions
- Improve data precision
- Increase wear comfort
- The diversity of measurement functions.
- Provide personalized, flexible and humanized smart textiles.
- Skin protection and beautiful appearance



ATP902 conductive silver resin can be screen printed or thermally transferred printed to the various color and pattern. If customers need.

ATP902 Washable conductive fabric & Smart Textile

Product Name	ATP902		
Material	Conductive Silver Resin Printed on PET Film		
Appearance	Light gray, thick liquid.		
Gloss	Light Gray		
Transfer PET Film Standard Size	420x300mm		
Transfer time and temperature	150°C / 25 Seconds		
Service Temperature	-30 ~105°C		
Abrasion Test	Test Before	3000RPM After	6000RPM After
Surface Resistance (Ω/\square)	$\leq 10^3$	$\leq 10^3$	$\leq 10^3$
Surface Resistance Test Method	Surface Resistivity Meter show on Green light : 10^3		
AATCC Test Method			
Washing machine	AATCC(Whirlpool WTW4800X02)		
Water volume	18±0.5gal ==>Middle water level (about 68.04 liters)		
Water temperature	27±3°C		
Washing machine stirring speed	179±2 spm		
Washing time	12min		
Dehydration time	6min		
Rotating speed	645±15 rpm		
AATCC Standard washing cloth	1.8kg		
AATCC Standard soap powder	66g		
Standard sample size	38cm X 38cm		
Test Result			
Washed 20 times (AATCC 135)	Before	After	
Surface Resistance (Ω/\square)	$\leq 10^3$	$\leq 10^3$	
Washing color fastness (AATCC-61-2A)	Level 4~5		
Perspiration color fastness (AATCC 15-2009)	Level 4~5		
Skin irritation test (ISO 10993-10)	PII=0		
Skin sensitivity test (ISO 10993-10)	No allergies situation		

RoHS Compliant; Abrasion Test (ASTM 4966 Standard Test 3000 RPM and 6000 RPM)
 Shelf life: within 6 months after shipment; storage method: 22°C; 55RH
 In the transfer print process, it will be possible caused color transfer, because different fabric material.
 The above data is actual test value, not absolute value.