

# Dongguan Nistar Transmitting Technology

## Company Presentation



## Nistar Facts and Figures



Established	: Oct, 2000 in China
Manufacturing space	: 60,000 square meters
Facilities	: Dongguan, China
Revenue	: USD 7 billion in 2018 (Corporate), USD 58M in 2018 (Nistar)
Employees	: 550
Major products	: High temperature cable, Electric Vehicle cable Industrial cable, Building Cable

# Company Structure



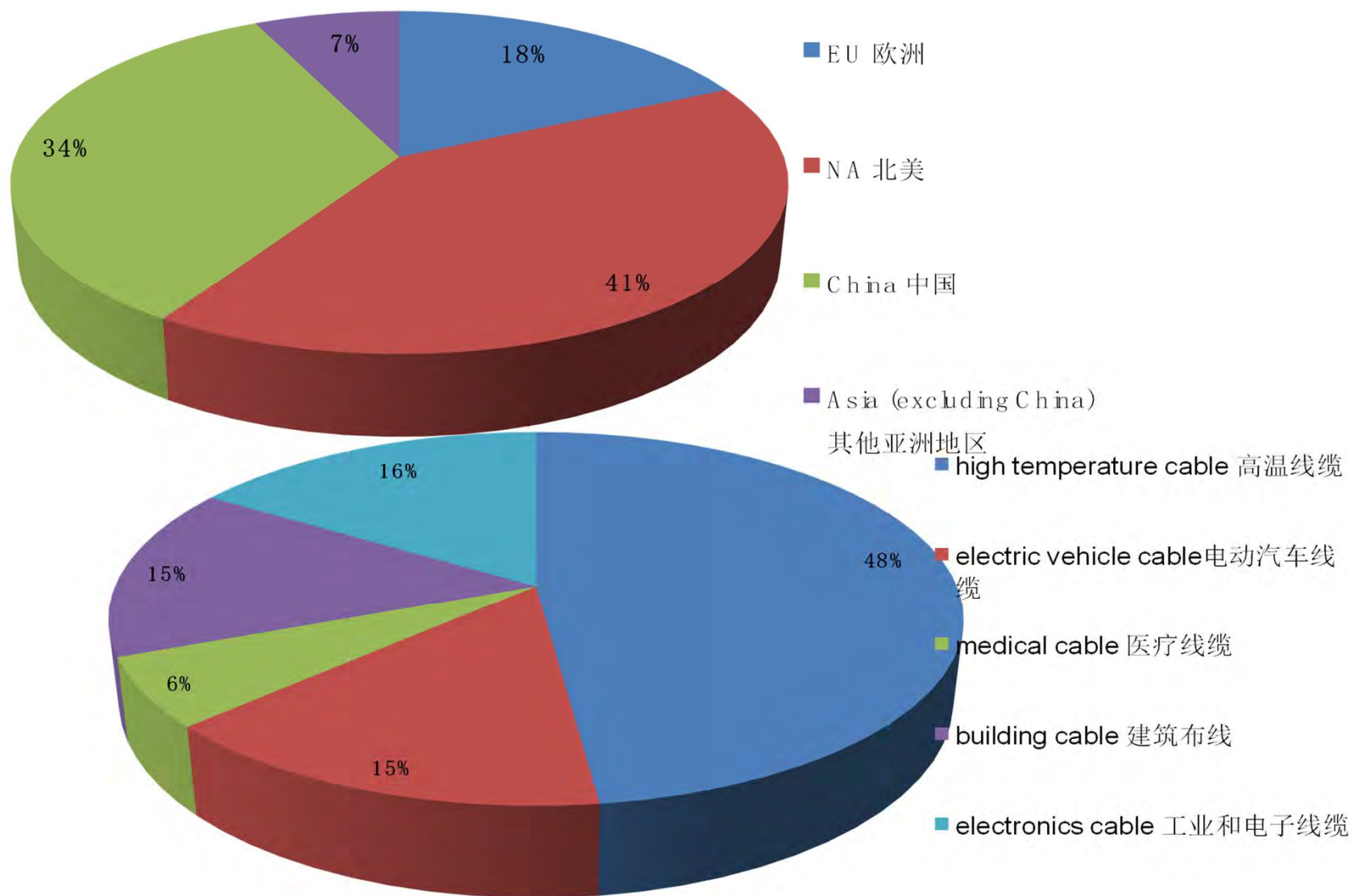


## Milestones of Nistar

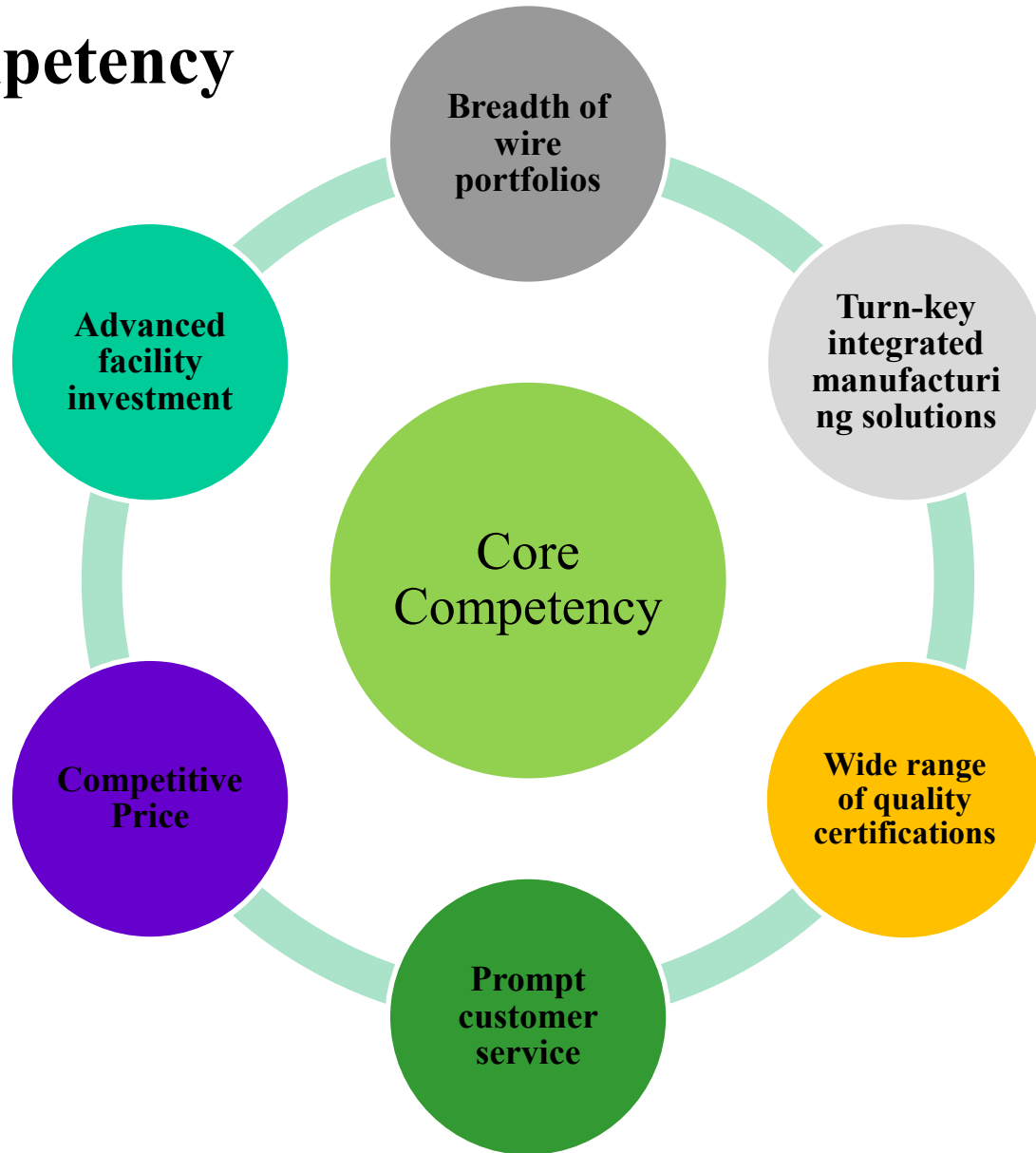
- **2000, Nistar was founded**
- 2001, Certified UL and VDE Cable
- 2002, Quality system Certified to ISO9001:2008
- 2005, Environment system Certified to ISO14001:2000
- 2007, Quality system Certified to TS16949:2000
- 2008, Awarded “National Key Product Certificate”
- **2008, Recognized “National High Technology Enterprise”**
- 2009, Recognized “Key Manufacturer Enterprise”
- 2009, Quality system Certified to ISO13485
- 2009, Certified UL, TUV cable for Solar Industry
- 2011, Certified UL Charge cable for Electric Vehicle
- **2015, Joined AVIC Baosheng with revenue of USD 3B**



# Revenue Breakdown by Geographic & Segment



# Company Competency





## Capability Overview

Overall Capability	Product Range: Standard and customized high temperature and high performance cable Temperature Range: From -100 degree Celsius to 450 degree Celsius Voltage Range: from 30V up to 50KV Minimum Wall Thickness: 0.15mm Conductor Size Range: From 44AWG to 300mm <sup>2</sup> Core wire: From single core to 120 core wires inside a jacket
Conductor and Braiding Material	<ol style="list-style-type: none"><li>1. Bare Copper</li><li>2. Tin-plated Copper</li><li>3. Overcoat Copper - Tinned copper strands covered by tin coating</li><li>4. Top coated Copper - Bare copper strands covered by tin coating</li><li>5. Silver-plated Copper - Silver plated to copper strands</li><li>6. Nickel-plated Copper -Nickel plated to copper strands</li><li>7. hybrid conductor construction</li><li>8. Heating Alloy Copper</li><li>9. Carbon Fiber, glass fiber yarn</li><li>10. Other specialty conductors</li></ol>
Insulation Material	<ol style="list-style-type: none"><li>1. Teflon (PTFE,PFA,ETFE,FEP)</li><li>2. Silicone Rubber</li><li>3. PVC,XLPVC,SRPVC</li><li>4. PE,MPPE,FRPE,XLPE,TPE,TPU</li><li>5. Fiberglass yarn, Mica Tape</li><li>6. Other specialty compounds</li></ol>
Manufacturing Process	Copper Stranding, Core Wire Extrusion, Paring Core Wire, Braiding, Wrapping, Cabling, Filtering, Jacket Extrusion

## Major Customers





# Quality Management System Certification

- ISO9001:2015
- ISO 14001:2015
- ISO 13485:2016
- IATF 16949:2016



ISO9001:2015



IATF 16949:2016



ISO13485:2016



ISO14001:2015

# Product Industry Certifications



UL Certified 786 Items



TUV Certified 5 items



VDE Certified 27 Items



CCC Certified 4 Items



CE Europe Certified



RoHS Green Certified



HIGH-DEFINITION MULTIMEDIA INTERFACE

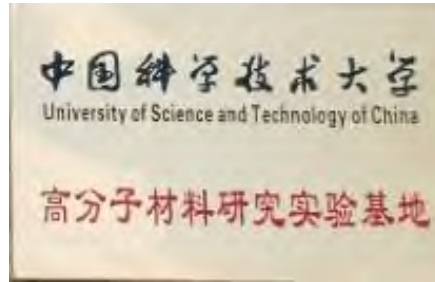


CSA Certified  
4 group items





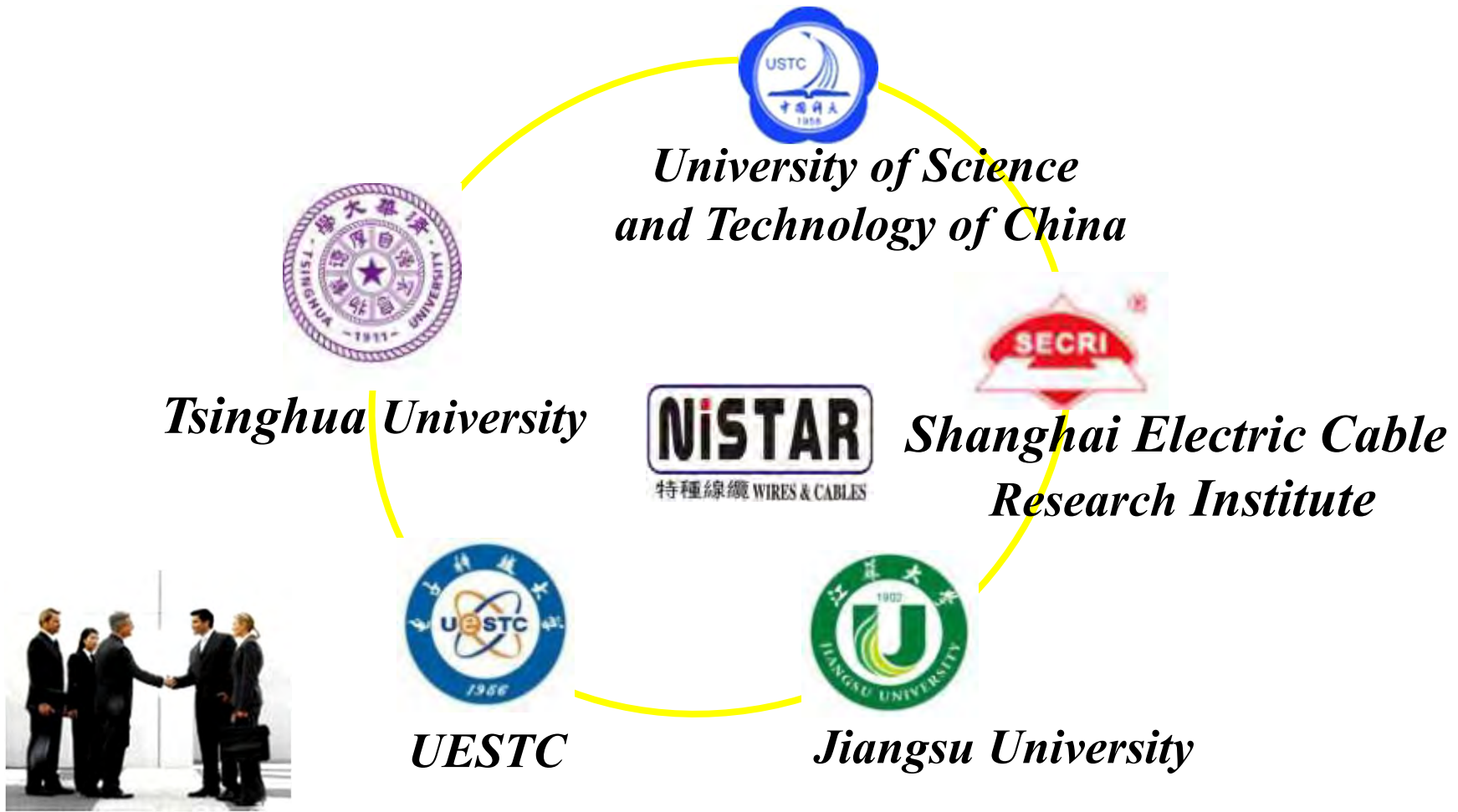
# Patents Granted



- Invention patent 21 items
- Practical patent 60 items
- Appearance patent 31 items
- Other patents 18 items
- **Total 130 items**



## Partnership with Universities & 3rd Party



# Major Product Portfolios

## High Temperature Cable

- Teflon cable (PTFE, PFA, ETFE, FEP)
- Fiberglass cable (silicone rubber)
- Cross-linked cable (XLPE)
- EPDM cable



## Electric Vehicle & Automotive Cable

- High-voltage silicone cable
- High-voltage XLPE cable
- TPE EV charge cable
- PVC EV charger cable
- Conventional automotive cable



## Electronics Cable

- PVC cable
- XLPE cable
- HF XLPE cable
- FRPE cable
- Building cable



## Industrial & Medical Cable

- Medical cable
- TPU/TPE cable
- Heating cable
- Robotic cable
- Other specialty cable

## Cables for Appliance Industry

**Industry Standard:** UL, VDE

**Nistar Featured Wire:** UL1911, UL10109, UL10086, UL3122, UL3071, UL1330, UL3398, UL3135 VDE H05S-K, VDE FG4G4, VDE 7023 and more

**Wire Type:** Teflon, Silicone, XLPE

UL & VDE  
Wire



Hot Fun



Gas Range



Microwave



Water Heater



Oven



Hob



Coffee Machine



Cooking Hoods

## Cable for Power Industry

UL Big  
Size Wire

**Industry Standard:** UL or custom-designed

**Nistar Featured wire:** Size from 10AWG to 200mm<sup>2</sup> with UL10070, UL10198, UL3132, UL3212 etc

**Wire Feature:** High Flexible, UV resistant, High Duration, Halogen Free (optional)

**Wire Type:** PVC, Silicone, TPE, XLPE



Power Cabinet



Power Inverter



EV Battery Assy



Solar Power Storage

## Cables for Motor Industry

**Industry Standard:** UL , VDE

**Featured Wire:** UL1199, UL3266, UL3398, UL3271, UL3122 and more.

**Wire Type:** Teflon, Silicone, XLPE

UL & VDE  
Wire





## Cable for Sensor and Automation

Customized wire

**Industry Standard:** Custom-designed to customer spec

**Wires type:** Single and multi-cores insulated PTFE, FEP, Silicone, TPU, XLPE,PVC



High-temp Sensor



Vibration Sensor



Temperature Sensor



NTC Sensor



Level Sensor



Fluid Sensor

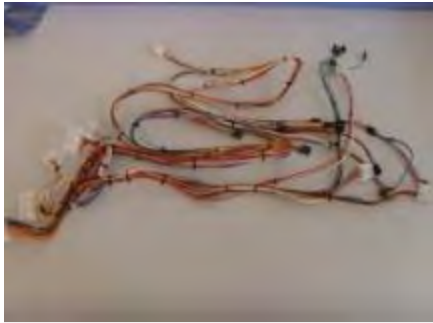


Position Sensor



Pressure Sensor

## Cable for Medical Device



Wire Harness



Surgical Device



ECG Cable



SPO2 Cable



Hemodialysis Device



Ultrasonic Device



X-Ray Device



Patient Monitoring

# Cable for Datacom Industry

Wire Type: SFP, Mini-SAS, SATA, LVDS, USB2.0, USB3.1, HDMI, DP, RF Cable



SFP Cable (developing)



Mini-SAS assembly



SATA cable assembly



MiniSAS Cable



HDMI assembly



Display Port



USB cable assembly



RF cable assembly

## High Voltage Cable for Electric Vehicle

Single and double insulation (shielding):

2.5mm<sup>2</sup>, 4.0mm, 6.0mm<sup>2</sup>, 10mm<sup>2</sup>, 16mm<sup>2</sup>, 25mm<sup>2</sup>,  
35mm<sup>2</sup>, 50mm<sup>2</sup>, 70mm<sup>2</sup>, 95mm<sup>2</sup>. 120mm<sup>2</sup>

### Features:

- Versatile and specially selected insulation material (Silicone, TPE, XLPE)
- High flexibility and bending radius
- Good thermal property up to 200C operating temperature
- Good mechanical property
- Design with and without EMI shielding function
- Bare copper or tinned copper conductor



## Charger Cable for Electric Vehicle

- EVE 3X14AWG+2X16AWG EVJE 3X14AWG+1X16AWG
- EVE 3X6AWG+1X8AWG+2X16AWG EVE 3X10AWG+2X16AWG
- EV 2\*120mm<sup>2</sup>+16mm<sup>2</sup>+2\*4mm<sup>2</sup>+4\*0.75mm<sup>2</sup>
- EV 2\*70mm<sup>2</sup>+16mm<sup>2</sup>+2\*4mm<sup>2</sup>+4\*0.75mm<sup>2</sup>
- EV 35mm<sup>2</sup>+16mm<sup>2</sup>+24mm<sup>2</sup>+4\*16mm<sup>2</sup>
- EV07E2Q-H, EV07EE-H, EV07EEC4E-H

### Features:

- Broad wire offerings applied from household to public fast charging (AC & DC)
- UL-62 certified cable (UL:E341742)
- CQC & DERKA certified for Chinese market
- Optional insulation (TPE, PVC, HF)
- Conventional design and coiled design
- Good mechanical, thermal, electrical property



# EV Connector and Socket



IEC type-1 AC Charging Plug



GB Mode2 AC Charging Plug



GB DC Charging Plug with Socket



GB AC Charging Plug with Socket



GB AC Charging Plug



GB DC Charging Plug



GB AC Vehicle inlet



GB AC Charging Socket-outlet



GB 63A AC Charging Plug



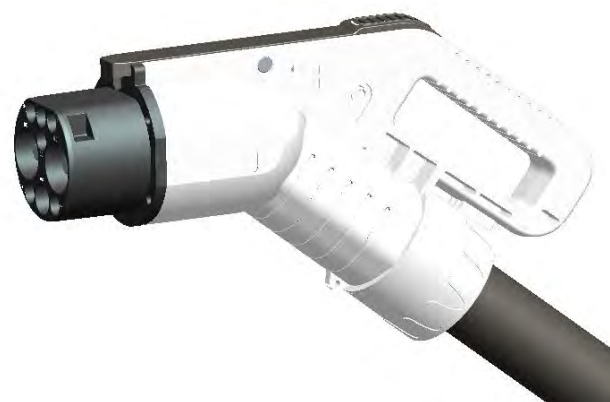
GB DC Vehicle inlet

项目 Item	参数 parameter
额定电压 Rated Voltage	250V/440V AC
额定电流 Rated Current	10A~32A
绝缘电阻 Insulation resistance	1000MΩ
耐电压 Withstand voltage	3500V AC
漏电流 leak current	≤0.5mA
工作温度 Operating Temperature	-40°C~+125°C
防护等级 IP Rate	IP54
阻燃等级 Flame Rating	UL94-V0
插拔力 Mating & un mating Force	<100N
插拔寿命 Plug service life	10000次

**GB AC Charging Plug**



项目 Item	参数 parameter
额定电压 Rated Voltage	750V/1000V AC
额定电流 Rated Current	80A~250A
绝缘电阻 Insulation resistance	1000MΩ
耐电压 Withstand voltage	4500V AC
漏电流 leak current	≤0.5mA
工作温度 Operating Temperature	-40°C~+125°C
防护等级 IP Rate	IP54
阻燃等级 Flame Rating	UL94-V0
插拔力 Mating & un mating Force	<140N
插拔寿命 Plug service life	10000次



**GB DC Charging Plug**



项目 Item	参数 parameter
额定电压 Rated Voltage	750V/1000V AC
额定电流 Rated Current	80A~250A
绝缘电阻 Insulation resistance	1000MΩ
耐电压 Withstand voltage	4500V AC
漏电流 leak current	≤0.5mA
工作温度 Operating Temperature	-40°C~+125°C
防护等级 IP Rate	IP54
阻燃等级 Flame Rating	UL94-V0
插拔力 Mating & un mating Force	<140N
插拔寿命 Plug service life	10000次



**GB DC Charging Socket**

## Production line Photos



Copper Stranding



Fiberglass Yarn Braiding



Teflon Insulation Extrusion



Silicone Wire Insulation Extrusion

## Production Line Photos



Paper Wrapping



Silicone Wire Saturation



Electronics Wire Insulation Extrusion



Warehousing

## Testing Lab- *Electrical Test*



DC Resistance Bridge



LCR Tester



High Voltage Tester



DC Dielectric Tester



Insulation Tester



AC Dielectric Tester

## Testing Lab- *Mechanical Test*



Elongation tester



Flexing Tester



Pull Tester



Vibration Tester



Bending Tester



Tensile Strength Tester



Low Temperature Chamber



Section Projector

## Testing Lab- *Environment Test*



Aging Oven Chamber



Flammability Tester



Low Temperature Tester



UV Resistance Tester



Temperature/Humidity Chamber



Temperature Rise Curve Tester



Bending Cycle Tester



Advanced REACH & RoHS Tester

## **Why Nistar can be a good partner?**

- **Strong finance background**
- **Trusted by world-class customers**
- **Reliable materials are used**
- **Experienced team in the industry**
- **Customized design solution for customers**

---

# Thank you

North American and Europe representative:



François Balthazar  
Cell: 514-983-1258  
1-800-479-1309 ext.707  
[francois.b@voltage.ca](mailto:francois.b@voltage.ca)

**Innovateur de ressources • Resource innovator**