

World Leading Intelligent Display and Control System Provider

Hefei Shinny Instrument Control Technology Co., Ltd.

Add: No.9 Shinan Road, Hefei, China

Email : overseasales@hfxlyb.com

Postal Code: 230088

Website: <http://www.hfxlyb.com> (Chinese website address)

<https://www.forklift-electrical-parts.com> (English website address)



[Official website]



[WeChat Official Account]



[LinkedIn]



[Facebook]



Dashboard
&
Display



ECU



DCDC
&
PDU/BDU



Part
&
Accessories



Electric Motor
&
Controller



Power Supply
&
Charger



Fleet
Management
System



ADAS AI
Safety
System



Safety
Weighing
System

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全球领先的工业及工程车辆智慧显示及控制系统供应商
World Leading Intelligent Display and Control System Provider



ENTERPRISE

Enterprise
Section

—The foundation of success, creating legends
Start at the same pace as the world,
Shinny instrument control,
rooted in the source of innovative wisdom of the world!

Company Profile

Shinny Instrument (Stock Code: 832864) Founded in 1996 with 30 years of industry experience, it is a national high-tech enterprise specializing in vehicle intelligent displays, instrument panels, telematics, VCU, MCU, electrification and power solutions. Its products are widely applied in industrial vehicles, construction machinery and material handling equipment, supplying key components for many world-renowned heavy industry enterprises. By integrating 5G communications, the Internet of Things and AI data analytics, Shinny delivers intelligent AI solutions including Advanced Driver Assistance Systems (ADAS), fleet management systems and vehicle safety systems to improve operational safety and efficiency. All our products and solutions are customizable to offer tailor-made packages for diverse application scenarios.

Development History

- 1996** ● The company was established in Hefei High-tech Zone.
- 1998** ● Developing a combined instrument panel
- 2003** ● Successful development of China's first LCD digital instrument
- 2011** ● Obtained TS16949 certification; Successfully developed vehicle-mounted communication and positioning module.
- 2015** ● Listed on the New Third Board, Securities Code: 832864; Anhui Provincial Science and Technology Progress Award;
- 2018** ● The National Equities Exchange and Quotations Center successfully completed the listing, with the stock code 832864; It has won the Science and Technology Progress Award of Anhui Province.
- 2022** ● Founded Anhui Jiangtian Big Data Technology Co., Ltd., expanding into the industrial Internet field; Certified as an SRDI SME by Anhui Provincial Department of Economy and Information Technology.
- 2025** ● Selected in National SRDI "Little Giant" Enterprise List; Accredited as Anhui Provincial Enterprise Technology Center.

Honorary Qualifications

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Research and Development Institution: ANHUI PROVINCIAL ENTERPRISE TECHNOLOGY CENTER, HEFEI ENGINEERING TECHNOLOGY RESEARCH CENTER, HEFEI ENTERPRISE TECHNOLOGY CENTER, HEFEI INDUSTRIAL DESIGN CENTER.

Key Project: NATIONAL 863 PROJECT SUB-ITEM, MINISTRY OF SCIENCE AND TECHNOLOGY SMALL AND MEDIUM-SIZED ENTERPRISE INNOVATION FUND PROJECT, ANHUI PROVINCE SCIENCE AND TECHNOLOGY KEY PROJECT, INDUSTRIAL VEHICLE V2X LUSHAO INDUSTRIAL INNOVATION TEAM, ETC.

Drafting standards: LED THE FORMULATION OF 1 INDUSTRY STANDARD QC/T 462-2009 WORKING HOUR METERS FOR AUTOMOBILE ENGINES AND 2 INDUSTRY ASSOCIATION STANDARDS. AS THE FIRST DRAFTER, WE COMPILED 3 ANHUI PROVINCIAL LOCAL STANDARDS INCLUDING THE IOT COMMUNICATION PROTOCOL AND ON-BOARD TERMINALS FOR INDUSTRIAL VEHICLES.

ALREADY HOLDS AN AUTHORIZED PATENT

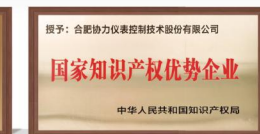
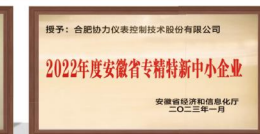
30+

OBTAIN THE SOFTWARE COPYRIGHT

60+



The company is a national intellectual property leading enterprise, a national "small and medium-sized innovative enterprise", an innovative enterprise in Anhui Province, a brand demonstration enterprise in Hefei City, and a specialized and innovative enterprise in Hefei City. It has also obtained qualifications and honors such as the Anhui Quality Award, the Anhui Science and Technology Progress Award, the Hefei Science and Technology Progress Award, the Anhui Famous Trademark, and the Anhui Famous Product.



1 Dashboard & Display

This product series maintains a leading market share in the industry for years. Based on RTOS, HarmonyOS, Linux and other operating systems, we have developed a full range of construction machinery instruments ranging from 2.8-inch to 12.3-inch. They support basic functions including instrument display, communication and card-swipe login. Optional extended functions cover 4G/5G communication, GPS/Beidou positioning and more. High-end models are equipped with on-board video surveillance, facial recognition, DMS and BSD functions. Personalized customized design is available according to customer requirements.

Product features



Color screen display



Smart buttons



Optional vehicle networking system



Optional touch screen



Optional full-edge display screen



Industrial and engineering vehicle single meter

High-definition, precise, stable and durable. Real-time display of multiple vehicle conditions.



Intelligent central control / video surveillance instrument

Based on the RTOS system, using CAN, Bluetooth, 4G and hard-wired communication methods, real-time data collection and monitoring display of vehicles are achieved.



Intelligent color screen display instrument

Using CAN, Bluetooth, 4G and hardwired communication methods, real-time vehicle data can be collected and monitored and displayed.

Intelligent central control screen



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SM9251

Technical Parameters

Display type: TFT 5-inch display, 800x480

Rated voltage: DC8V - 36V

Communication method: Dual CAN interface

Optional configurations: Facial recognition or card swiping

Touch screen: Supports touchscreen and key operation settings

Instrument functions

Battery capacity, fuel quantity, gear position, single trip mileage, speed, total mileage, personalized function

SM9275

Technical Parameters

Display type: TFT 7-inch display, 1024x600

Rated voltage: DC8V - 36V

Communication method: Dual CAN interface

Operating temperature: -30~85°C

Optional configurations: Facial recognition or card swiping

Touch screen: Supports touchscreen and key operation settings

Instrument functions

Battery capacity, fuel quantity, gear position, single trip mileage, speed, total mileage, personalized function settings, fault indication

SM9271

Technical Parameters

Display type: TFT 7-inch display, 800x480

Rated voltage: DC8V - 36V

Communication method: Dual CAN interface

Optional configuration: Facial recognition or card swiping

Instrument functions

Battery capacity, fuel quantity, gear position, single trip mileage, speed, total mileage, personalized function settings,

SM92A1

Technical Parameters

Display type: TFT 10.1-inch display, 1024x600

Rated voltage: DC8V - 36V

Communication method: Dual CAN interface

Operating temperature: -30~85°C

Touch screen: Touch screen supported

Installation method: Embedded / Suspended mounting

Instrument functions

Two-way video monitoring recording playback, radio, Bluetooth music playing, left and right channels, wired communication, human-computer interaction, personalized function settings, fault indication, total mileage display

Intelligent color screen display instrument



ZLZB225 Instrument

Technical Parameters

Display type: 7-inch color LCD screen
Operating voltage: 8V - 32V
Operating temperature: -30~75°C
Storage temperature: -40~80°C
Protection level: IPX4 (front side)

Expand Functions

The internal integration of on-board terminals for non-road mobile machinery (non-four-wheel vehicles need to obtain certification from a third-party certification body) enables functions such as vehicle positioning and emission data upload, meeting the requirements for non-four emission monitoring stipulated in the "HJ1014-2020" standard.



DZB950 Embedded Instrument

Technical Parameters

Display type: Full-angle 5-inch color LCD screen, 800x480
Operating voltage: 8V - 100V
Operating temperature: -30~75°C
Protection level: IP65

Application scenarios: Electric forklifts, tractors, sightseeing vehicles, golf carts, etc.

Expand Functions

- 32-bit Cortex M3 main control chip, multiple national display languages;
- Supports 6 buttons + card swiping function, supports configuration of electronic control system parameters;
- 1 CAN interface and input for switch quantity, analog quantity.

SM9216

Technical Parameters

Display type: TFT 6-inch display screen
Rated voltage: DC8V - 36V
Communication method: Dual-channel CAN interface
Optional configurations: Facial recognition or card swiping
Touch screen: Supports touchscreen and key operation settings

Instrument functions

Battery capacity, fuel quantity, gear position, single trip mileage, speed, total mileage, personalized function settings, fault indication



DZB492 Color Display Instrument

Technical Parameters

Display type: 5.2-inch TFT color LCD screen, 416×1280
Operating voltage: 12V or 20-110V
Operating temperature: -30~75°C
Protection level: IP65 (front), IP54 (bottom shell direction)
Application scenarios: Internal combustion and electric forklifts

Expand Functions

- 32-bit Cortex M3 main control chip, with multiple display languages
- Supports 4 buttons + card-swiping function, and supports configuration of electronic control system parameters
- Can be expanded to integrate vehicle networking or non-four-vehicle terminal devices



DZB835 BMS Instrument

Technical Parameters

Display type: TFT 0.96-inch display screen, 160x80
Operating voltage: 9V - 100V
Operating temperature: -20~70°C
Protection level: IP65
Application scenarios: Electric forklifts

Expand Functions

- Display the status information of BMS, such as total voltage, cell voltage, cell temperature and fault information, etc.;
- Support menu operation;
- Export BMS logs and BMS software upgrades via USB drive.

52DZB6005 Single Meter

Technical Parameters

Display type: 1.3-inch LED display, 128x64
Operating voltage: 8V - 100V
Operating temperature: -30~70°C
Protection level: IP65 (front), IP54 (back)
Application scenarios: Electric forklifts

Expand Functions

- 32-bit Cortex M3 main control chip;
- Integrated one CAN communication interface, capable of reading and displaying electronic control information, vehicle speed metering and timing, as well as fault codes, etc.;
- Integrated three-color LED for display and alarm.

52SS902 Single Meter

Technical Parameters

Display type: HT1621 dot matrix screen, 800x480
Operating voltage: 12V/24V system
Operating temperature: -30~75°C
Protection level: IP65 (front)

Application scenarios: Forklift timing display

Expand Functions

- 32-bit Cortex M3 main control chip
- Timing accuracy of 0.1 hours, with no loss of timing data even in power failure conditions



2

ECU

Develop a series of on-board intelligent control products, including intelligent control boxes for fuel and electric forklifts, VCU controllers, domain controllers, etc., and develop domain controllers and master controllers for future industrial vehicles.

Product features



Precise overall
vehicle logic



Highly anti-interference
Industrial-grade chip



Dynamic torque
adaptive adjustment



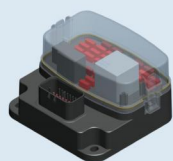
Wide voltage, high
and low temperature



Waterproof, shockproof
and dustproof design



Intelligent matching of
operating conditions and



Intelligent Control Box

Flexible relay and fuse configuration
CAN communication and intelligent
diagnostic function for switch
quantities



VCU Safety Controller

Control of industrial vehicle driving system
Operation control of load handling system
Fault diagnosis function and fault mode



(Intelligent Vehicle Control)
Domain Controller

Industrial Vehicle Travel Control
Load Handling Control
Integrated Hydraulic & Electrical Control
Integrated BMS & Thermal Management
Fault Diagnosis & Fault Modes

Intelligent Control Box



HZK17023 Intelligent Diagnostic Control Box

Technical Parameters

Application scenarios: Electric forklifts, pallet trucks, tractor trucks, etc.

Working voltage: 12V/24V

Working temperature: -30°C to +75°C

Protection level: IP65

Expand Functions

1. Supports 23-pin AMP quick connection port
 2. Supports multiple replaceable mini fuses
 3. Supports multiple replaceable 20-40A relays; 1 10A flashing relay
 4. Supports switch quantity diagnostic function; 1 CAN bus
- The above functions can be customized and developed according to requirements.

HZK17049 Intelligent Diagnostic Control Box

Technical Parameters

Application scenarios: Electric forklifts, pallet trucks, tractor trucks, etc.

Working voltage: 12V/24V

Working temperature: -30°C to +75°C

Protection level: IP65

Expand Functions

1. Supports 35PIN + 14PIN AMP quick connectors
 2. Supports multiple replaceable mini fuses
 3. Supports multiple 10A NO & flasher relays; replaceable 30-40A NO/NC relays
 4. Supports 1 CAN bus; digital input diagnosis
- All functions available for custom development

Vehicle-mounted controller

Functional Safety VCU Controller (Extension Arm Forklift Controller)

Technical Parameters

Application scenarios: telescopic boom forklifts, other construction machinery vehicles

Working voltage: 12V/24V

Operating temperature: -30°C to +75°C

Protection level: IP65

Core processor: 300M 3-core, certified by AEC-Q100 and ASIL-D safety standards

Expand Functions

1. Input ports: 32 channels, capable of handling both digital and analog signals (current, voltage)
2. Output ports: 30 channels, supporting PWM and digital signals, with a maximum current of 4A
3. 3 CAN buses
4. 60-channel and 94-channel dual-connector modules
5. Supports user-defined C language programming





VCU Controller



KZQ Controller



GZB482 High-Preselection System



KOB Forklift Controller



DH280A Waterproof Electro-hydraulic
Direction Control Box



HCU04 Automatic Transmission
Controller for Forklift Truck



AGV-PDU Power Distribution Unit System Solution for Intelligent Handling Robots

The intelligent mobile robot AGV-PDU power distribution unit system solution is specifically designed to enhance the operational efficiency and reliability of AGVs. Through efficient power conversion, full-dimensional real-time monitoring, and intelligent remote management, it provides stable, safe, and controllable power distribution support for AGVs, helping the equipment operate continuously and efficiently.



High-efficiency DCDC Conversion

It converts high-voltage electricity to 24V/12V/5V low-voltage electricity with up to 95% efficiency, featuring low energy consumption and less heat generation, ensuring stable power supply for each unit.

Comprehensive data monitoring

Through 4G technology, real-time data such as voltage, current, temperature and faults can be remotely collected with an error rate of less than 1%, providing support for energy consumption analysis and fault troubleshooting.

Contactless Switching Technology

Replace the relay with MOSFET and combine it with eFUSE protection. It offers fast response, long lifespan, and supports real-time fault diagnosis.

Flexible remote control

The mobile APP enables one-click control of power on/off, charging, fan operation, as well as delayed power up and down. It avoids current shock and is safe and convenient to operate.



Pre-charge protection function

Equipped with pre-charging for the main control motor, it gradually builds up pressure during startup to avoid large current surges and extend the lifespan of the components.

Data Storage and Export

The APP stores 30-day operation data and fault records. It supports exporting in Excel format, facilitating historical review and maintenance analysis.

Rich interface expansion

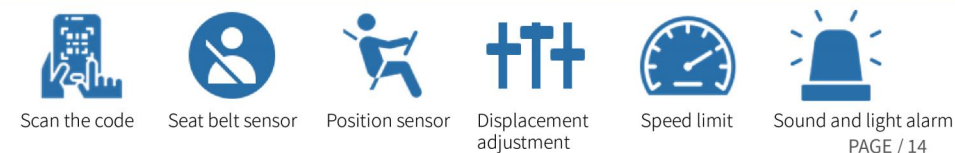
Provide multiple interfaces to facilitate the connection of different devices and modules, thereby enhancing the system's compatibility and adaptability.

Low battery intelligent alarm

When the battery level drops below 15%, the APP will send out alerts and local notifications to prevent the equipment from shutting down due to low power, thus ensuring the continuity of operations.

4 Part & Assessories

The TSG81-compliant safety supervision solution supports multiple optional authentication methods, including card swiping, fingerprint recognition, cloud facial recognition and local facial recognition. It can detect hazardous operations such as overspeeding, overloading, over-height lifting, driver seat deviation and seatbelt release. Integrated with a digital service platform and cooperating with multiple forklift OEMs, it meets differentiated forklift licensing requirements across regions.



TZ320V300W Series DCDC

Technical Parameters

Rated input voltage: 320V

Rated output voltage: 12V / 13.8V / 24V

Rated output power: 300W

Protection functions: High and low voltage isolation, input reverse connection protection (without damaging the entire vehicle components), input undervoltage protection, input overvoltage protection, over-temperature protection, output overvoltage protection, output overcurrent protection, output short-circuit protection (short-circuit current less than 0.1A)



LG080V300W Series DCDC

Technical Parameters

Rated input voltage: 12V/24V/48V/80V

Rated output voltage: 12V/13.8V/24V/48V/80V

Rated output power: 300W

Protection functions: Automatic voltage regulation, input reverse connection protection (without damaging vehicle components), input undervoltage protection, input overvoltage protection, over-temperature protection, output overvoltage protection, output overcurrent protection, output short-circuit protection (short-circuit current less than 0.1A)



DC power converter
500W



Lind DC Power Converter
400W

Product selection diagram - PDU/BDU

PDU (Power Distribution Unit) and BDU (Battery Distribution Unit) are core power distribution and protection components for industrial and construction vehicles.

With abundant connector supplier resources and flexible configurations, the products adopt an integrated electronic control system with high & low voltage isolation. All products are automotive-grade, rated IP67, featuring robust structure and excellent heat dissipation.



17023



17035



17049



Abundant connector supplier resources and flexible configuration



Automotive-grade product, IP67 rating, sturdy structure, excellent heat dissipation performance



Integrated electronic control system, high and low voltage separation



Customizable to meet the specific requirements of customers

5

Electric motor & Controller

By adopting high-performance permanent magnet motors combined with intelligent vector controllers, the power and torque are strong, the operation is low-noise and energy-saving, with strong overload capacity and stable and reliable output. It is equipped with multiple protections such as overcurrent, overvoltage, overtemperature and short circuit. It has industrial-grade shock resistance and temperature resistance design, suitable for various working conditions such as forklifts, agricultural machinery, and engineering vehicles, with wide adaptability, durability and no maintenance requirements. Products such as controllers and domain controllers are developed to create domain controllers and master controllers for future industrial vehicles.



L636 + L636 Forced Air Cooling Heat
Dissipation Electronic Control Assembly



Tractor electronic control assembly



L638 + L636 Flat Plate Heat
Dissipation Electronic Control Assembly



Oil-to-electric conversion electronic control assembly

6

Power Supply & charger

Industrial-grade vehicle power supply and charging complete solution, with wide voltage compatibility input, intelligent constant current and constant voltage charging, high conversion efficiency, low heat generation, strong anti-interference ability. It has full protection functions against overcharge, overdischarge, reverse connection, insulation monitoring. The waterproof and dustproof structure is compact and suitable for lithium battery and lead-acid battery systems. It can be plugged and used directly, and is compatible with various new energy industrial vehicles.



YKXN205Q Start-up Parking Lithium Battery
205Ah, 5.25KWh 530*300*267

Name	Parameters
Battery type	Lithium iron phosphate (LFP)
Rated voltage	76.8V
Nominal capacity	280Ah
Nominal energy	21.5KWh
Maximum continuous charging current	100A
Maximum continuous discharge current	200A
Heating up	10°C/h
Cooling method	Natural cooling
Pre-charge resistor/time	100W/3S
Protection level	IP65
Charging operating temperature range	0~60°C
Discharge operating temperature range	-20~60°C
Dimensions (Length × Width × Height)	716×686×631mm



YKXN280Q Parking Battery
280Ah, 7.168KWh 480*450*200



Lithium iron phosphate (LFP)
280Ah, 21.5KWh 716*686*631mm



Portable intelligent charger series

6kw/10kw Series
(Approx. 18KG -excluding gun cable)



L422*W215*H310mm

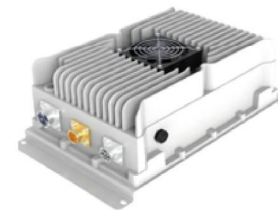
20kW Series
(Approx. 20kg -excluding cable/gun)



L452*W215*H355mm

OBC Vehicle Charger

3.3KW On-board Air-cooled Chsrger



L328*W260H112mm

6.6KW On-board Air-cooled Charger



L302*W311*H113 mm

External charger



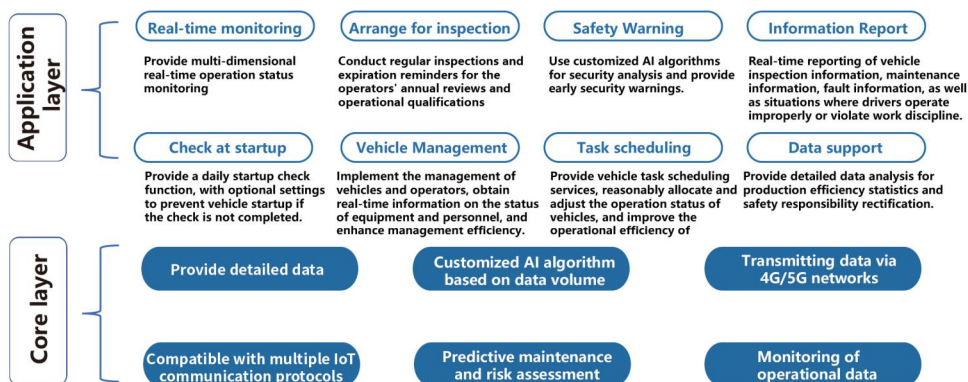
Contact type / Non-contact type charger



7

Fleet Management system

The company has established an integrated vehicle networking platform, which supports five application scenarios including operation monitoring, emission supervision, fleet management, safety supervision, and leasing services. It offers customized services, including private deployment, MES system integration, and data cleaning.



8

ADAS AI Safety system

The AI security auxiliary management system realizes integrated security management and provides multi-channel BSD or video monitoring solutions. It adopts the Linux AI security computing platform, with 7 to 12.3-inch high-definition central control screens. Optional features include facial recognition, BSD, DSM, and 360° surround view, offering comprehensive safety assistance for industrial vehicle operations.



① Sensor

② Weighing Machine Host

③ Trigger Switch

④ i switch

Power

The map illustrates the global reach of the Chinese diaspora. China is the central focus, colored in blue. Dotted lines indicate the flow of migration from major Chinese cities to diaspora centers worldwide. Shanghai is linked to America, Beijing to Germany, France, and Italy, and Guangzhou to South Africa. An inset map of China provides a detailed view of its internal geography and major urban centers, including Beijing, Shanghai, Guangzhou, and others.
