

高精度闪电定位预警系统 high-precision Lightning positioning and warning system

中科天际科技股份有限公司 China Science Skyline Tech Co., Ltd.

Introduction





China Science Skyline Tech Co., Ltd.

was established on September 27, 2007. The registered address is Room 1401, Building 6, Phase II, IBI Yucheng Center, Yinchuan City, with a registered capital of 50 million yuan. The company has been focusing on the research and development of lightning protection products for a long time, committed to providing 6IALPS all-domain intelligent lightning protection system solutions, and building an intelligent lightning-free security world. The company mainly serves customers in the fields of cultural relics and buildings, energy and chemical industries, etc.

The company is an incubator of Yinchuan Center of the Chinese Academy of Sciences, a state-level high-tech enterprise, a state-level intellectual property rights demonstration enterprise, a technical benchmarking enterprise of Ningxia Hui Autonomous Region, a specialized and innovative demonstration enterprise, a service-oriented manufacturing demonstration enterprise, and a technology-based small and medium-sized enterprise. With lightning protection technology innovation center, Ningxia Intelligent Lightning Protection Engineering Research Center of Enterprise Technology Centers, Autonomous Regions and autonomous regions of small and medium-sized enterprises, double gen service platform, recognized by CNAS laboratory innovation platform and small provincial talent highland, innovation team, such as personnel carrier, has the lightning protection industry leading domestic research and development and industrialization of science and technology ability.







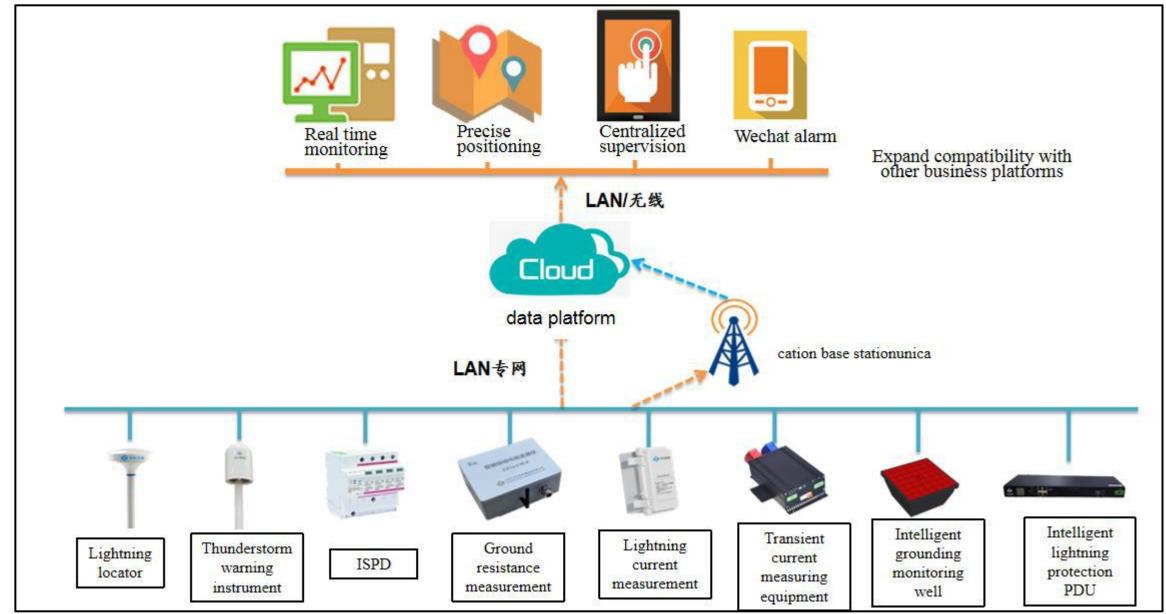








Figure 1: system platform panel



Certificate of award





figure 2: Certificates
Awarded "Good Technology in China" by China Association of Productivity Promotion
Centers (2018)



Awarded "Good Technology in China" by China Association of Productivity Promotion Centers (2019)

Figure 3. Workstation Equipment Sites



Application cases





Ground work station at Yuhuangge (Jade Emperor Pavilion)



Ground work station at ancient city Haiyuan Xi'an





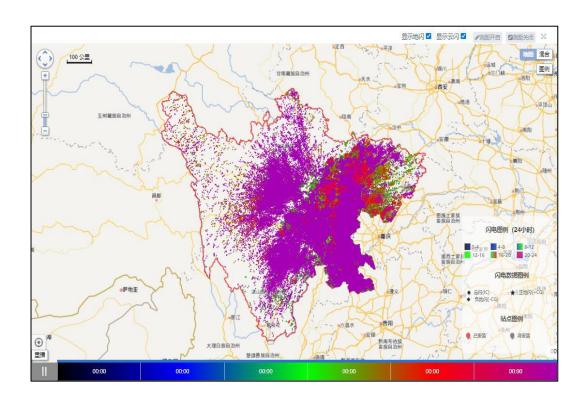


Figure 4: Display of monitoring data panel of ground lightning and cloud lightning in Chengdu (Scatter diagram of lightning density, one point represents one lightning.)

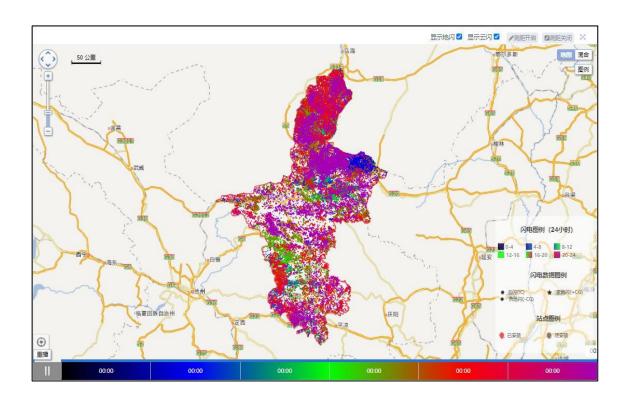


Figure 5: Display of monitoring data panel of ground lightning and cloud lightning in Ningxia (Scatter diagram of lightning density, one point represents one lightning.)





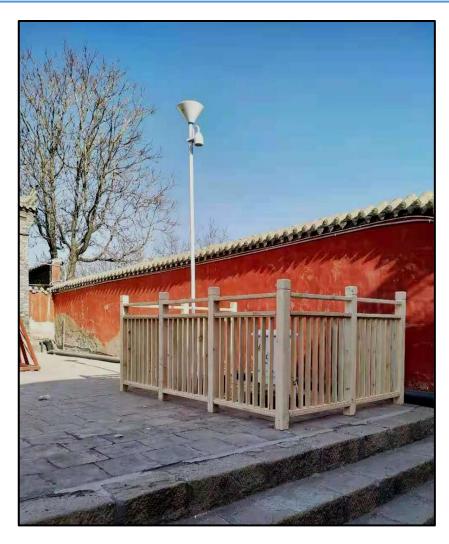


Figure 6: Integration of early warning and positioning

Introduction:

The High-Precision Lightning Positioning and Warning System is aimed at intelligent lightning protection application fields such as buildings and ancient buildings, petrochemical industry, photovoltaic power station, wind power generation, civil aviation airport, national defense military industry, civil explosion sites, refueling and gas stations, etc. Research on key technologies involved in key links such as sensing, networking, computing, control and service in the intelligent lightning protection system based on the Internet of Things. Develop intelligent lightning protection terminal products with international advanced level of sensing data, automatic transmission, edge computing and lightning monitoring and warning and protection platform based on cloud computing. Domestic standards for intelligent lightning protection shall be formulated to improve the level of intelligent lightning protection technology and intelligent manufacturing. To build a new platform for integrating Internet of Things and mobile Internet technologies.



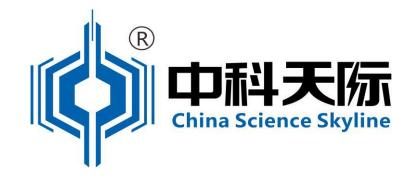




Figure 7: Integration of early warning and positioning

Introduction:

Aiming at the practical needs of the technical problems that the existing technologies at home and abroad cannot accurately predict and locate lightning in advance, the project breaks through the key technologies of lightning early warning and location and lightning movement track rapid making. In terms of the false alarm rate, the existing domestic target is <40%, and the technical target achieved by the project is <10%. In terms of the early warning time, the existing domestic index is within 2 hours, and the technical index achieved by the project is to achieve high-precision near warning within 10 minutes, and conventional precision near warning within 30 minutes. The project has been registered by the Science and Technology Department of Ningxia Hui Autonomous Region in 2019, and won the title of "China's Good Technology" in 2018 and "China's Good Technology" in 2017. The main products of the project have been applied in more than one hundred domestic companies and units, and have generated an economic value of nearly ten million yuan. The project has obtained 29 patents and issued 5 enterprise standards. The products of this project are mainly targeted at the seven major industries of cultural relics and ancient buildings, chemical industry, electric power, communication, tourism, aviation, military weapons, ammunition, oil depot and so on. The development prospect of the project is optimistic, and the value added space is large. The implementation of the project is of great significance to improving the ability and level of lightning disaster prevention, protecting the national interests and the safety of people's lives and property, maintaining public security, and promoting economic and social development.



sense of worth: attentive profession absorbed

China's leading lightning protection solution provider for intelligent Internet of things