

Shenzhen Socon Electric Co.,Ltd

With the help of mobile 2G/3G/4G cellular network, the remote monitoring system of PV pump IOT connects the field photovoltaic inverters to cloud-end servers, which makes it easy for users to monitor, manage, control, analyze, maintain, data statistics, remote diagnosis and unattended field equipment through human-machine interfaces such as web, mobile app and small programs. Solve the problems of remote, scattered, uneven maintenance personnel and difficult maintenance in PV pump industry, improve work efficiency and make management more intelligent.

Solution of remote monitoring
system for PV pump based on IOT



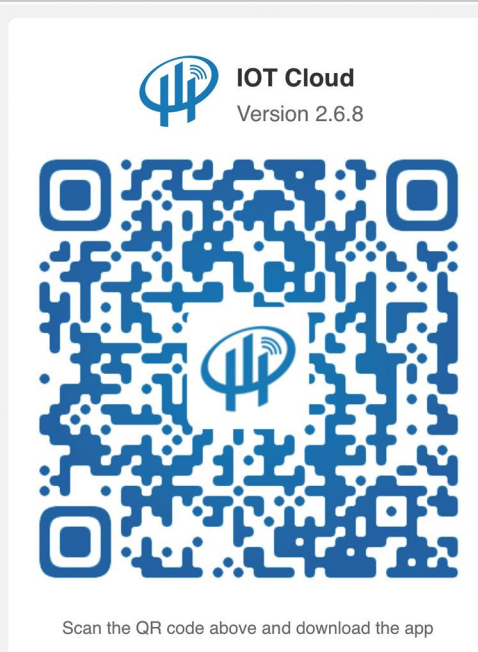
SOCON

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System Framework Topology

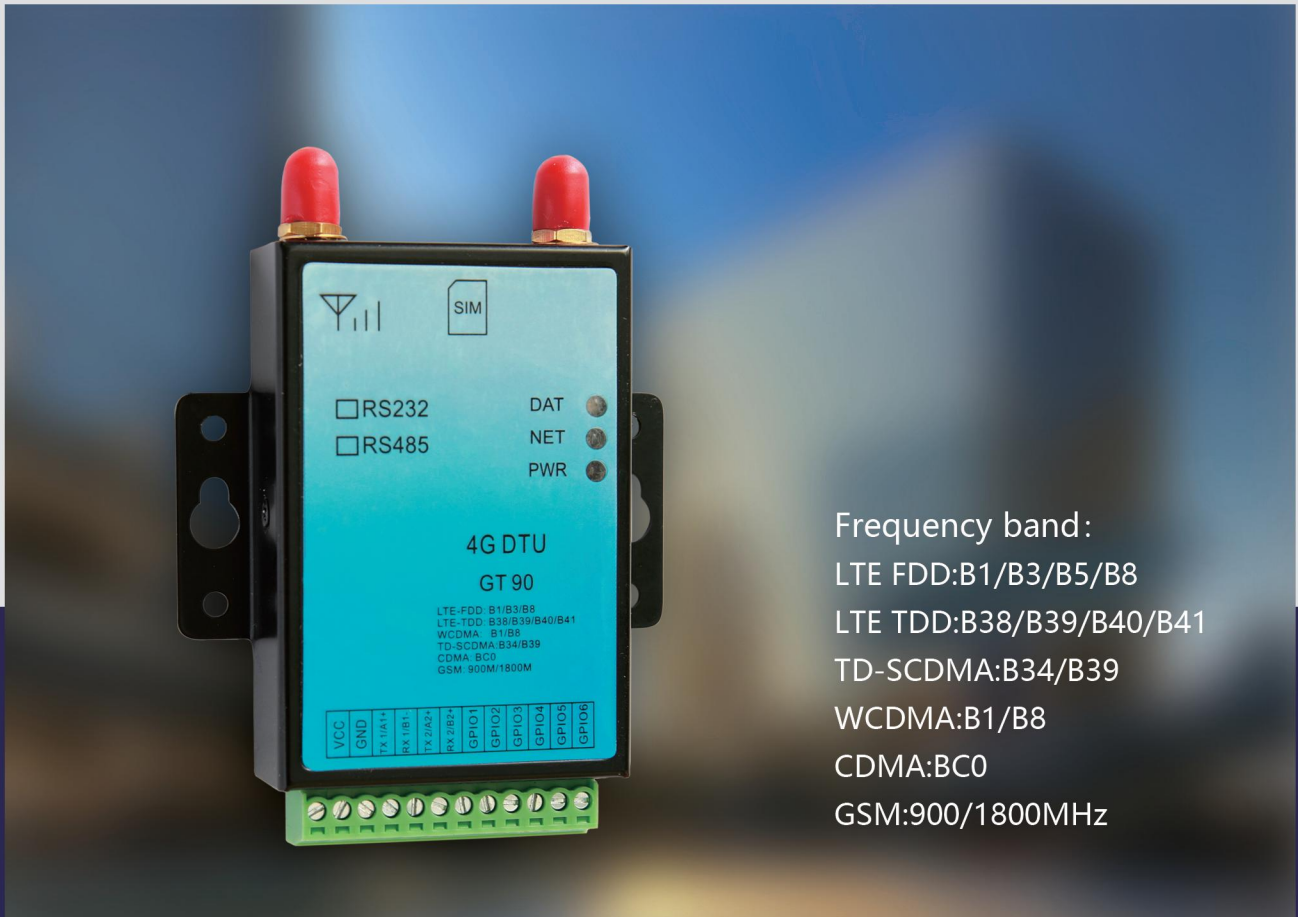


Mobile APP software download QR code



BEST IOT

Selection of 7-mode all-netcom industrial-grade 4G module,
built-in reliable protocol stack to make it to be universal.



Frequency band:
LTE FDD:B1/B3/B5/B8
LTE TDD:B38/B39/B40/B41
TD-SCDMA:B34/B39
WCDMA:B1/B8
CDMA:BC0
GSM:900/1800MHz

Selection of 7-mode all-netcom industrial-grade 4G module, built-in reliable protocol stack to make it to be universal;

Built-in GPS + Beidou positioning chip, can achieve real-time position reporting;;

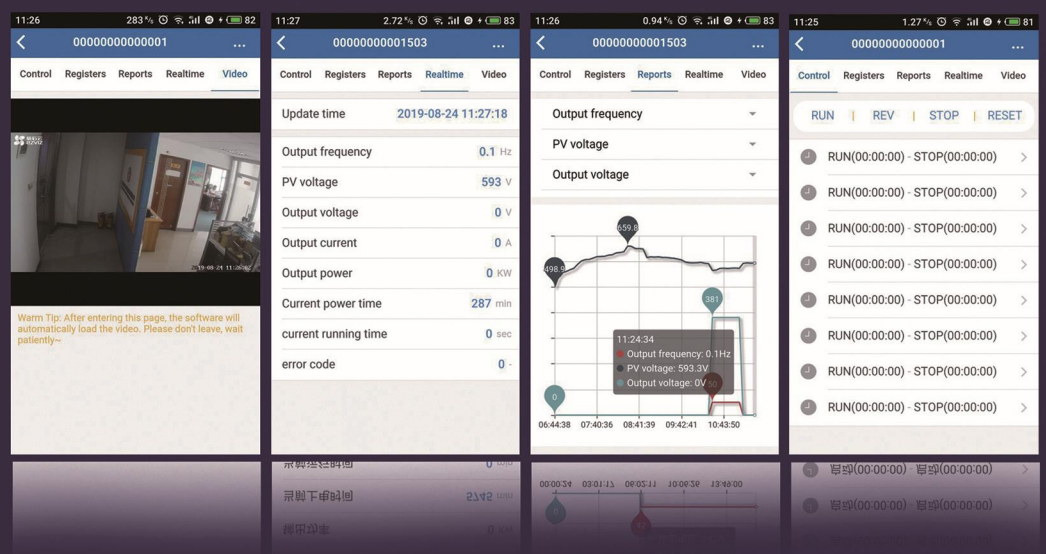
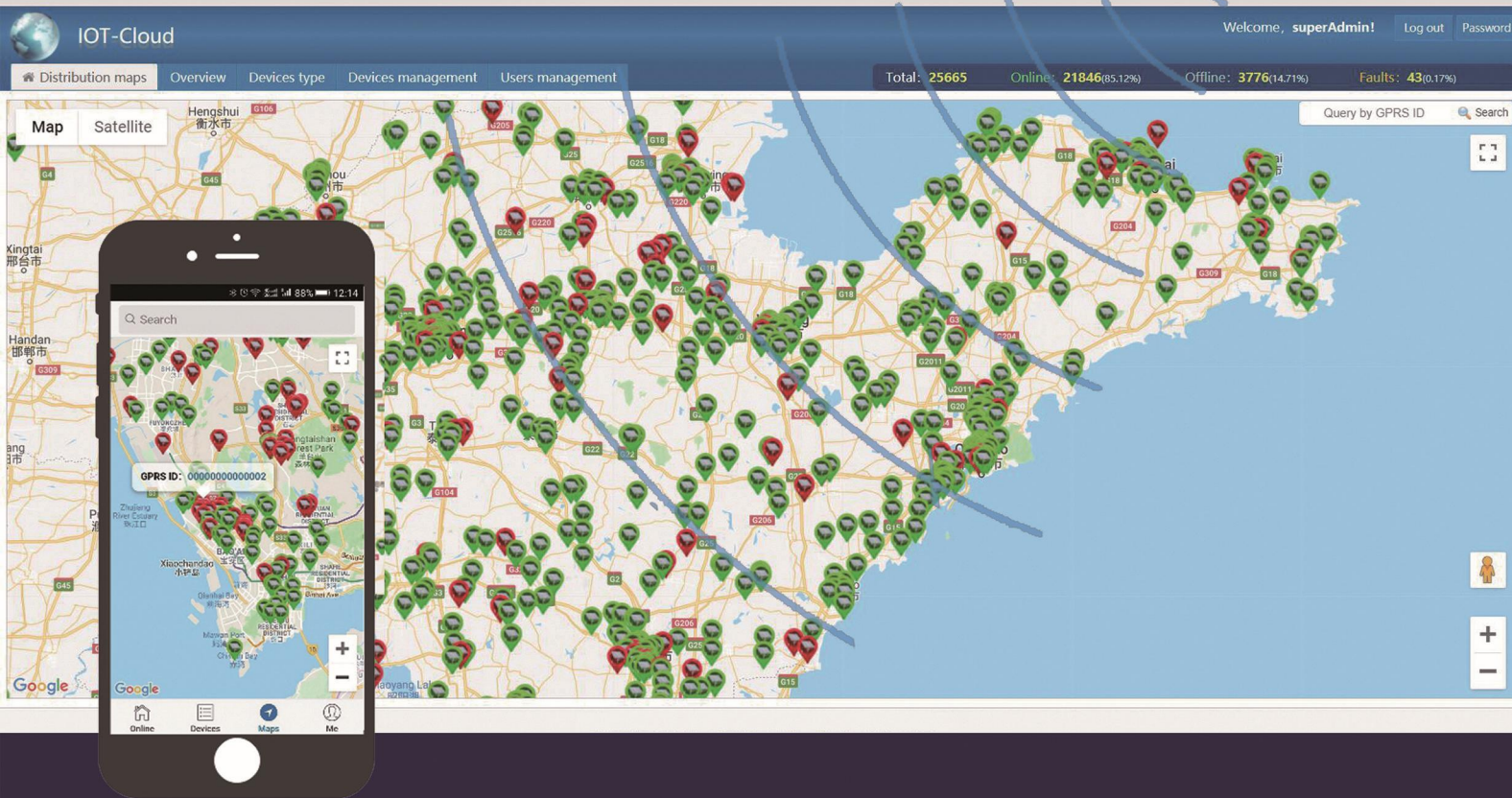
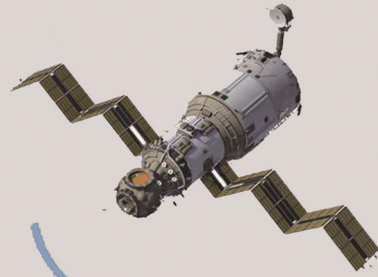
Support transparent transmission, custom registration package, heartbeat package and secondary development of cloud platform, etc;

Embedded modbus RTU protocol, the function of serial port server is supported;

Multiple hardware and software reliability design, supports automatic reconnect while the line dropped to keep the device always online;

Support the protocol of IOT cloud platform communication

High precision GPS + Beidou positioning chip
can realize real-time position reporting.



Support transparent transmission, custom registration package, heartbeat package and secondary development of cloud platform, etc



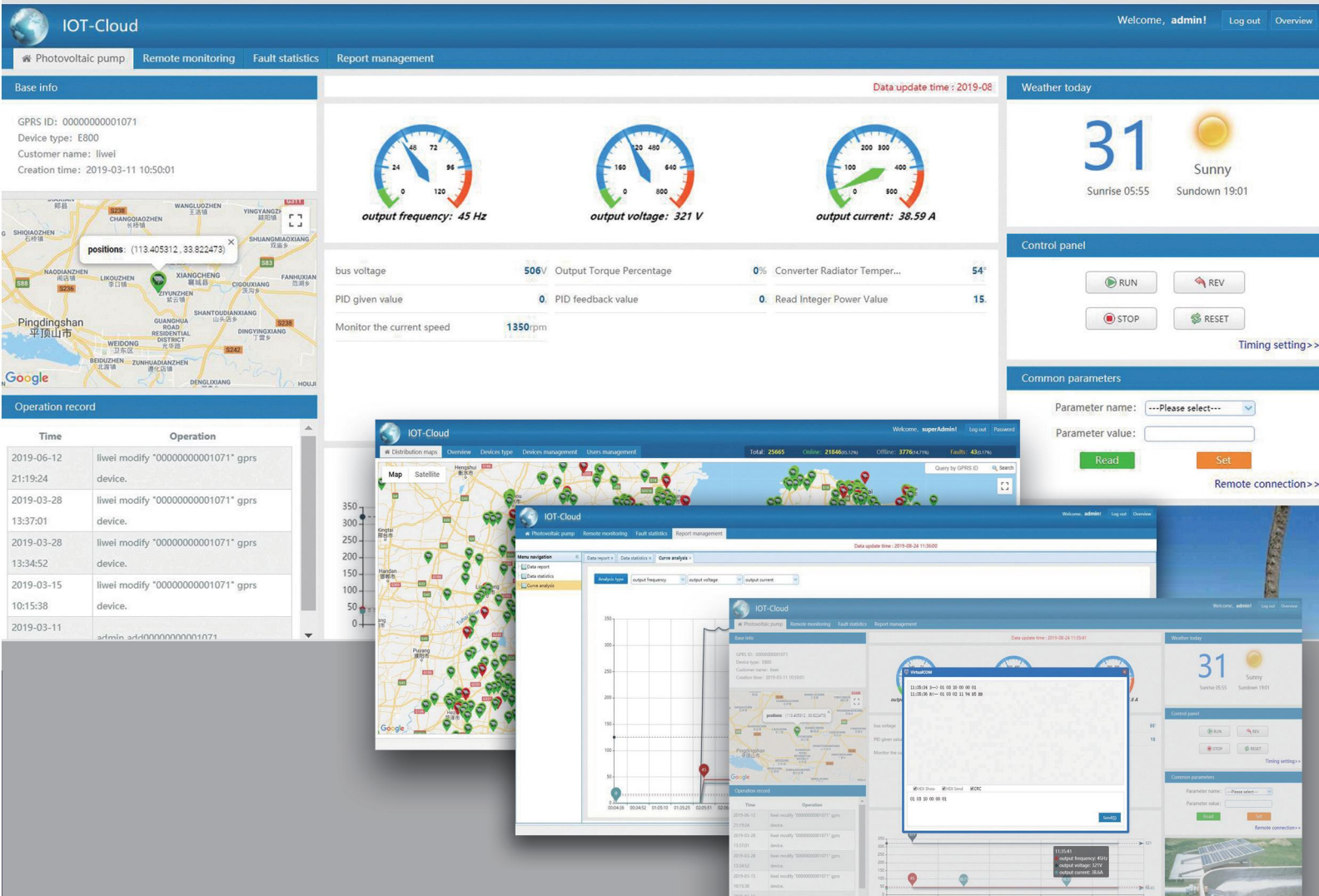
GT90 Embedded Modbus RTU serial port server function, even in the absence of a network, it can still automatically complete data acquisition and storage.

GT90 supports master and slave modes. In the absence of network environment, GT90 is set as master mode, which can connect the main station equipment such as PLC and computer to the system. The equipment will transfer the data received locally to the remote field slave station equipment, and the content of the transmission is not limited. This mode is suitable for the occasions where existing systems, such as SCADA. The control center has a network and can transfer the instruction and data through the cloud service Man-Machine Interface (web, APP) of our company. In addition, GT90 also supports custom registration frame and heartbeat frame communication format, can fast access to third-party cloud service system.

Multiple hardware and software reliability design,
supports automatic reconnect while the line dropped
to keep the device always online;



Supporting IOT cloud platform communication protocol



Field application case

