# H3G-TV Introduction

Applications

Applies to all the fields including base station, data center, transportation ,etc, used for monitoring each battery temperature and voltage .
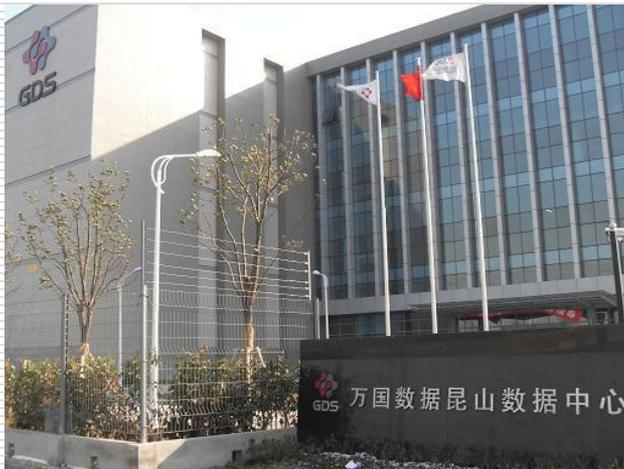
Data Center

Product Components

Appearance	Name	Description
	CM Module	One module is able to manage up to six battery strings or 960 batteries
	TV module	One module can monitor one battery's voltage and temperature
	TC Module	Monitoring one charge & discharge current and one ambient temperature, one module only for one string

Topology

HUASU
your best battery advisor

Without a CM module, CELLCHECK modules can be directly connected to a third party monitoring system with a converter
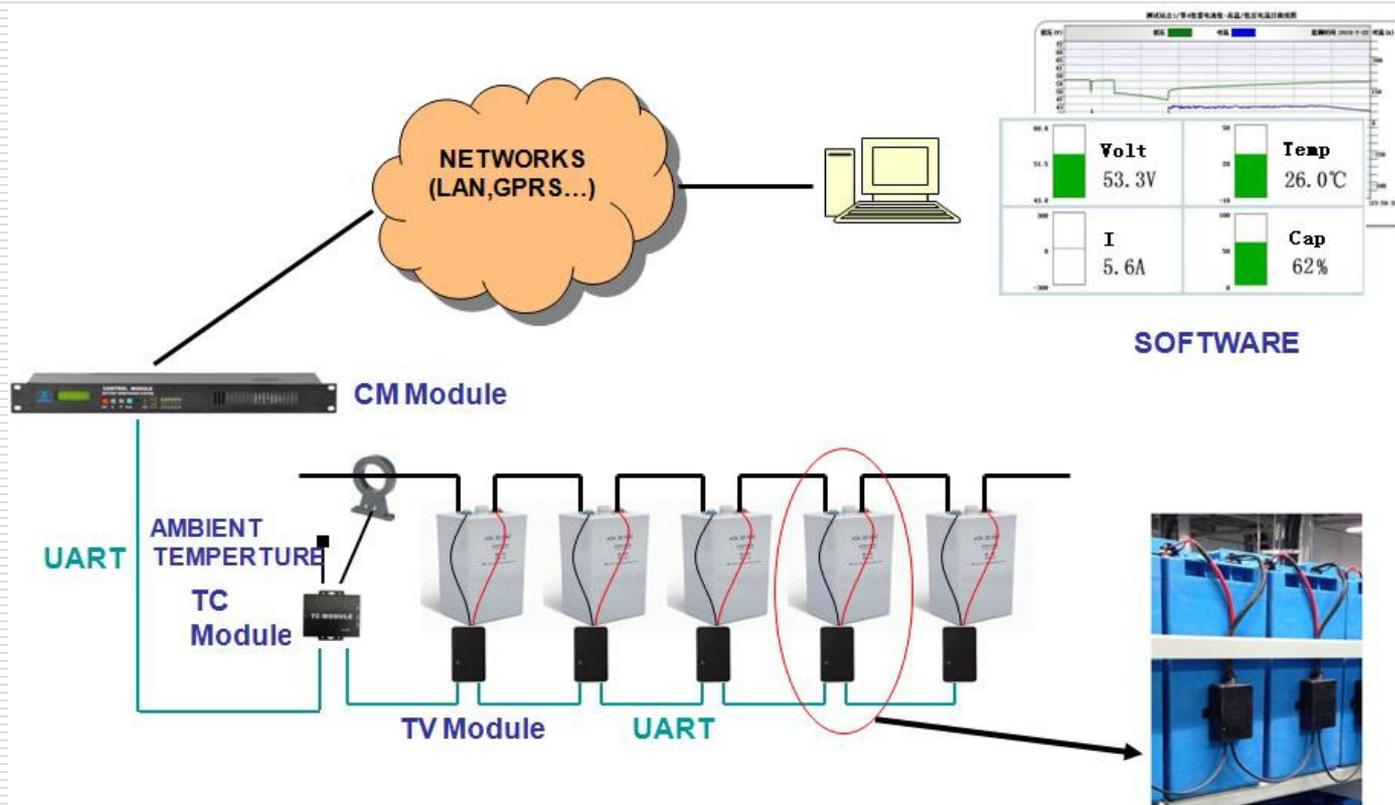
Main Functions

Item	With a CM module	Without a CM module
Monitoring items	Battery temperature, cell voltage, string voltage, ambient temperature, charge & discharge current.	Battery temperature, cell voltage, ambient temperature, charge & discharge current.
Record the process of charging & discharging	√	X
Alarm	√	X
Dry contact	√	X
LCD display	√	X
Communication port	RS485，LAN	RS485 (Need a convertor)
Communication protocol	MODBUS /RTU, MODBUS /TCP, SNMP	MODBUS /RTU

Main Features

HUASU
your best battery advisor

NO.	Features
1	Huasu technology single module product, one module monitoring one battery, easy for installation without special training .
2	Can block ripple interference from UPS.
3	Monitoring voltage, resistance and battery temperature, accord with the standard ANSI/TIA - 942 and GB50174-2008.
4	Flexible configuration, support MODBUS, SNMP protocol, easy to access the third party monitoring system, low cost solution.

TV Module Interface

Test port (J1), connect to battery

UART communication port (COM1, COM2), for module looped

The green light is power light, and red light is communication light

TC Module Interface

Test port (J1), connect to current transformer and temperature sensor

Power input port (VIN), DC8-13 V

UART communication port(COM1,COM2), for module looped

The green light is power light, and red light is communication light

Converter Interface

RS485 port , connect to CM module or computer

UART communication port(COM1,COM2),
for module looping

Only use for connecting directly to a third monitoring system without a CM module

The green light is power light, and red light is communication light

CM Module Interface

LCD display Keys   LEDs
                  I/O Input   LAN

Ports for communicating with TA,TC and TV modules
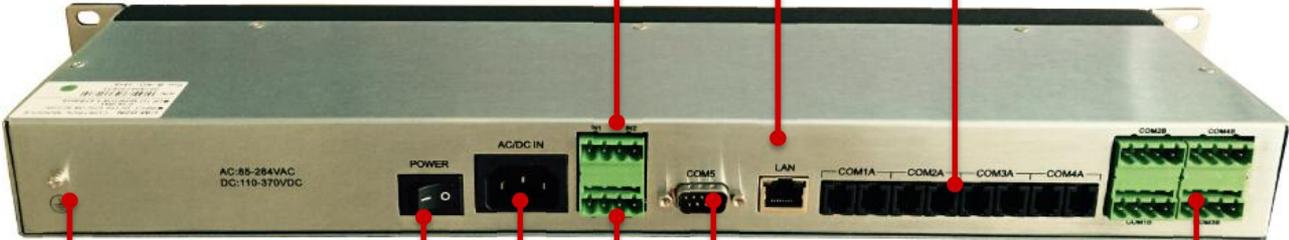
Ground point

Power switch

Power input

Dry contacts

RS485 Port

12V Output

CONTROL MODULE
BATTERY MONITORING SYSTEM

华塑科技

Accessories

Picture	Name	Description
	TV module test cable	Connecting the battery to TV module, including voltage cable, temperature cable and temperature probe
	Current transformer	500A optional, measure the battery charging and discharging current
	TC test cable	Connects CT and temperature sensor to TC module
	TV module communication cable	Loops TV module

Communication Interface

H3G-TV can be accessed by a CM module or a third part monitoring system without a CM module

Item	With a CM module	Without a CM module
Device name	CM module	Converter
Port number	COM5, LAN	RS485 port
Communication mode	RS485,TCP/IP	RS485
Data format	1 start bit, 8 data bits, 1 stop bit, non parity	1 start bit, 8 data bits, 1 stop bit, non parity
Communication baud rate	19200BPS(Default)	9600BPS(Default)
Communication protocol	MODBUS /RTU, MODBUS /TCP,SNMP	MODBUS /RTU

Installations

Pasted on battery cases directly

CM module could be installed in a 19 inch cabinet, TC module and converter could be installed on the battery shelf.

Order Reference

Type	Requirements	Order P/N
With CM module	Monitoring 1 string 40 cells of 12V battery	H3G-TV-12V40S1CT
	Monitoring 2 strings 12 cells of 2V battery	H3G-TV-02V12S2CT
Without CM module	Monitoring 1 string 40 cells of 12V battery	H3G-TV-12V40S1T
	Monitoring 2 strings 12 cells of 2V battery, without monitoring current and ambient temperature	H3G-TV-02V12S2

The End

Thanks!