



# Mine Personnel Position System

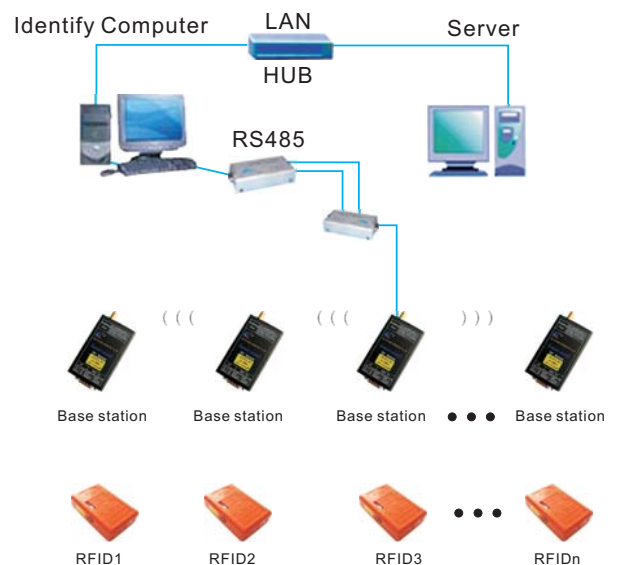
## Features of the system

**Multi-function:** Real-time tracking and positioning of underground staff and motorcycle, the attendance of target subject, the two-way communication including the paging from the staff above the ground to the underground and the urgent alarm sending from the underground staff to the people above the ground.

**High capability:** The underground staff positioning system is able to accommodate sixty-four communication base stations and 6,000 staffs' identification cards, which is sufficient to meet the demand of the large and medium-sized coal mines.

**Comprehensive monitoring:** Due to the staffs' identification cards embedded in the multi-functional miners' lamps can reach 120 meters' transmission range and enable the monitoring range of each communication base station to reach more than 200 meters, the system is able to realize the comprehensive monitoring of the whole coal mine with a lower cost.

**Integration of a variety high-tech:** This system integrates the wireless data transmission, CAN Bus cable transmission, microcomputer technology, on-line programming and multi-level software technology. The wireless transmission range is as long as 120 meters with the principle of low-power and intrinsic safety. The integration of two-way communication and alarm and the combination of lighting and communication are used to realize the weight reduction, energy conservation and cost down.



## RF modules

HAC-UP192D02S RF module used for mobile terminal Card, HAC-LM192D02M as the fixed station can connect with main computer through cable by Rs485 serial communication.

## Mobile terminal Card:

- 1. The power switch and the alarm button
- 2. Timing transmitting, Normal ID signal, Location attendance
- 3. Alarm ID transmission after button pressed:
- 4. Receive data from main-station, calling
- 5. Alarm for sound and light, input the gas detection signal
- 6. ID setting
- 7. Two-way system powered by Miner's lamp

