Hospital Monitoring

Dubai - Mirdif Hospital



Background

The *WineCap ™* data loggers for measuring temperature and humidity guarantee line-of-sight radio range greater than 5 km and, thanks to CAPETTI's Ultra Low Power technology, long-life batteries enable autonomy of up to 12 years with temperature and humidity samples every 10 minutes. The measurements recorded by the data loggers are stored locally and sent to gateways at scheduled intervals.

The solution

In hospitals such as Dubai's Mirdif Hospital, with large windows, the WSN (wireless sensor network) can propagate uniformly along the structure by positioning the gateway antenna on one of the low buildings external to the system. Moreover, battery repeaters make it possible to redirect the signal from increasingly remote data loggers (thanks to intelligent routing that autonomously selects the best route), thereby increasing radio coverage by up to 16 times. As a result, it is even possible to capture data from the sensors when they have to be installed in a very shielded location (typically departments further inside, basement departments such as operating theatres and casualty departments)..

The result

By means of a CONFIRM and ACK mechanism, the application profile guarantees that data is definitely received (true data logging). Data are captured a second time and also stored by the gateway. The *WineCap ™* system reliably manages the concentration and transmission of temperature and humidity data relating to the rooms and corridors in the various departments, regularly sending it to the BEMS (Building Energy Management System) via MODBUS protocol.



WSD00TH2_LD

Capetti ELETTRONICA DAL 1973

The winning choice WineCap

- ✓ WSD00TH2_LD (temperature and relative humidity measurements)