



The KL6401 LON Bus Terminal enables direct connection of LON devices. The network variables of the connected devices are available for the Bus Coupler or the higher-level bus system. This simplifies the data exchange between different systems and a LON network. Several KL6401 terminals can be used with a single Bus Coupler or a Bus Terminal Controller.

Beckhoff Building Automation for "Oriental Hotel Zhejiang" modernization

## Advanced Ethernet control system for hotel in eastern China

→ The Oriental Hotel Zhejiang is owned by Hangzhou Dayuan Group Co., Ltd. and operated by Howard Johnson International (China). During the recent refurbishment, the air conditioning and lighting control systems were upgraded with Ethernet-based building control technology from Beckhoff.



Howard Johnson Oriental Hotel Zhejiang in Hangzhou, the capital city of Zhejiang Province on the east coast of China, is a 24-storey hotel complex with 239 rooms and suites and several restaurants. Retrofitting of the outdated building automation system focused on the air conditioning system and the lighting. The Shanghai Modern Building Design Institute, commissioned by the client with the implementation of the project, decided to use the building control and I/O system from Beckhoff. "We predominately used Beckhoff products for this refurbishment project due to the wide range of products offered, the flexible configuration, the robust performance, and the advanced technology", said Chen Shihe, president of the Institute.

### Scalable, Ethernet-based air conditioning system and lighting control

The control system is based on BC9000 and BX9000 Bus Terminal Controllers with Ethernet interface. The data points were linked via Beckhoff Bus Terminals, which facilitate and simplify retrofitting of building functionalities. Communication Bus Terminals enable integration of subordinate subsystems such as EIB, LON or DALI, for example. The engineers at Oriental Hotel Zhejiang utilized this

advantage by integrating the existing LON modules for the air conditioning system into the I/O system via the KL6401 Bus Terminal. A total of 36 room controllers are connected via three of these LON Bus Terminals.

A BC9000 Ethernet Bus Terminal Controller integrates the LON Bus Terminals. Due to the implementation as "bus-independent" communication terminals, LON devices can be connected to all higher-level bus systems, such as Ethernet TCP/IP in this case.

The old lighting control system was replaced with several Bus Terminals I/O stations with BK7350 Modbus Bus Couplers. The Modbus Bus Couplers are connected via the serial interface of the BX9000. The BX9000 communicates with the higher-level control center via a Modbus TCP protocol.

The new system has been up and running for a few months now, and both the contractor and the hotel are very satisfied with the performance and the resulting increase in comfort for hotel guests.

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