Remote Mobile Robot System with Basler IP Camera

A new Mobile Robot System has been designed by National Instruments ASEAN. This system includes a high-performance Basler BIP-1300c IP camera and an NI CompactRIO Embedded Controller which provides a powerful system for rapid design, prototyping and deployment of a high-performance robotic application.

The Mobile Robot System provides the highest flexibility and convenience and can substitute for human interaction in environments that are hazardous, dangerous, or simply cannot sustain human life.

This Mobile Robot System is equipped with a remote control vehicle chassis for movement, a robotic arm for manipulating objects in the environment, a wireless router for remote control, a set of batteries for power, and of course, the Basler IP Camera for relaying real-time data about the environment back to the control room.

Using the real-time images as a reference, quick, clear instructions for movement of the chassis and action by the arm can be made with a Nintendo Wii controller connected via Bluetooth to a computer in the control room. This real-time feedback allows for robot control that “feels better” and seems more intuitive.

The combination of Basler’s high-performance, compact IP camera and a National Instruments CompactRIO powered by LabVIEW has proven to be an ideal way to provide the Mobile Robot System with the highest flexibility and the most user friendly performance.

For more product information: ni.com/compactrio
For more information, please contact us at +49 4102 463-500 or e-mail us at bc.sales@baslerweb.com.