Sonifex IP Extender

Sonifex's Redbox RB-IPE is an IP Extender for GPIO and Analogue Control Signal control over Ethernet. It has 16 GPIs on eight RJ45 connectors, consisting of eight isolated current sink inputs and eight pull-to-ground protected inputs, and 16 GPOs on eight RJ45 connectors using eight isolated relay change-over contacts and eight opto-isolated contacts. These rear panel RJ45 connectors have an LED for each GPIO which shows its state.

On another eight RJ45 connectors are eight 0-3.3V/5V/12V input signals and eight output signals nominally at 0-3.3V output, with other output voltage configurations possible. The outputs can all be controlled from the inputs of another RB-IPE, or from Ethernet commands, allowing any tallies and control signals, together with analogue potentiometer movements, to be sent across a network.

When two units are connected together at different sites, if a GPI state changes at one site the unit sends the new state to the other site and the appropriate opto-isolator output changes on that unit. Similarly input voltage controls are monitored and the changing voltage is sent to the remote unit where an output voltage changes accordingly.