

controllers used for the last 20 years. This new technology embeds intelligence and communications in control devices, providing added functionality and cost savings for our customers. An open, multi-vendor communications network, combined with the power of industrial personal computers, completes this new logic platform.

Monitoring, Controlling Electrical Power Cutler-Hammer has also developed a power distribution monitoring and control system, called IMPACC, that interrogates electrical systems for information about circuit breaker and motor starter status, metering and energy values, and provides the ability to remotely monitor and control all devices in an electrical system. An IMPACC system consists of a family of meters, protective relays, circuit breaker trip units, motor starters and control relays. These devices communicate to a personal computer using Windows-based software.

For the trucking industry, Eaton has introduced Fleet Advisor, a sophisticated truck fleet management system. The Fleet Advisor system combines an Eaton on-board computer, software and mobile communications technology to help truck fleets improve productivity and profitability. Fleet Advisor constantly gathers information from both the driver and vehicle and automates processes such as vehicle and driver scheduling, routing and tracking, recording of trip information, stop activity and vehicle inspections.

"Expert" Products A higher order of smart products are those that choose a best course of action, based on analyzing inputs from several alternatives in their logic memories. These choices are based on the expertise of the engineers and operators that know how best to optimize the product's performance, and thus are known as "expert systems."

ADVANCED SYSTEMS FOR DRIVER SAFETY AND PRODUCTIVITY

Eaton leads the way with the world's only forward-looking, radar-based vehicle collision warning system on the market. Components of the system (lower left) include electronic controls that connect to a Doppler radar system which detects road hazards, such as stopped or slow-moving vehicles, and alerts the driver through a dashboard console that gives both audible and visual warnings. Eaton has introduced Fleet Advisor (top), a complete logistics management package consisting of hardware, software and service support that helps truck fleets improve the efficiency and productivity of their operations. Through a strategic alliance with Bosch, Eaton is providing a superior anti-lock braking system (left, center and lower right) ideally suited for trucks. Advanced electronic technology enables the braking system to maintain precise control of brake pressure, preventing lockups and giving drivers improved steering capability and control.