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HMI displays increase angle of vision and cabinet protection

Tablet-sized HMI builds on established features with modern resolution.

By Mike Bacidore, chief editor

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Two new tablet-sized HMI displays from Maple Systems bring an expanded operator field of vision and in-cabinet protection to the industrial marketplace. Enter the HMI5097XL and HMI5097NXL 9.7-in HMI displays.

A 70° viewing angle enables an improved field of vision for efficient monitoring and control of operational status. "These particular displays have an extremely wide viewing angle," explains Larry St.Peter, CEO of Maple Systems. "It's virtually from side to side. With previous HMI displays, if you went off-axis more than 30°, your ability to see what's on-screen would go away. With these new displays, you get resolution all the way around, from almost every angle. The operator no longer has to stand directly in front of the HMI."

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Nearly identical in terms of features and functionality the HMI5097XL and HMI5097NXL are both slim-form HMIs with 512 MB Flash memory and 256 MB of RAM for complex and graphic-intensive projects. The main difference between the two models is that only the HMI5097XL comes UL-certified and with support for CANbus. Both models are IP65-rated to resist dust and water. "All of our HMI products support around 200 communication protocols to varying industrial controllers and motion products," says St.Peter. "This offers integration to any PLC, PAC or motion controller. In addition to being NEMA-4-rated, the CPU board is PCB-coated, so if the cabinet door is open and water gets inside, it's not an issue. That's an added protection we supply on all HMI products."

The 9.7-in units are the third product in this series, says St.Peter. "All have virtually the same great features and functionality, other than the display size," he says. "The first two products were a 12-in and 15-in HMI. All three have a high-speed processor and more memory compared to our smaller-scale HMIs."

The 9.7-in screen is the display of choice for tablets. "The new HMIs emulate the viewing experience of an iPad or Android tablet in terms of display and size," explains St.Peter. "This is an HMI product, so it uses an analog resistive touchscreen and functions as a typical HMI product does. We also have another 9.7-in display that's offered with the same capacitive experience—swipe, pinch, zoom—as an iPad. That product has been on the market for a few months now. Display manufacturers are sourcing this newer technology of larger screen sizes with high-resolution displays, and they make them in huge quantities. That generates very attractive pricing."

The commercial market drives the display industry, says St.Peter. "We're taking advantage of that cost benefit," he explains. "It allows us to offer high-level functionality at a very low price. The 9.7-in units have a larger display with a high-tech look that's more robust. And they have a more powerful processor—1 GHz CPU. The 9.7-in display is the first of its size with 1024 x 768 pixel resolution for a really crisp-looking display."

“A 70° viewing angle enables an improved field of vision for efficient monitoring and control of operational status.”

Maple Systems' customers are in the industrial marketplace, and the display's silver sides and dark-grey aesthetic add a modern look to any machine design. "We sell into industries such as food processing, packaging, and oil and gas," says St.Peter. "With the new 9.7-in units, a machine manufacturer can integrate a product that will be more visible and look more attractive on the machine than they previously would at a lower price point. The new models are sleek and modern looking. With this type of display, you can have a nice display that complements the look of the machine design. We're appealing to machine builders who are trying to save money but also give them the functionality and look they want. Even better, the 9.7-in models offer the same functionality as 15-in display but with a smaller footprint."

The HMI5097XL and HMI5097NXL can be configured to your specifications with Maple Systems EZwarePlus software, which includes alarm management, batch recipes, trending and data logging, says St.Peter. "The software has virtually anything you could want," he explains. "It's easy to use with an intuitive interface. And it's packed with features such as Internet browsing and remote capabilities. Maple Systems also offers complimentary technical support and a comprehensive online support center."

About the Author



Mike Bacidore is the editor in chief for Control Design magazine. He is an award-winning columnist, earning a Gold Regional Award and a Silver National

Award from the American Society of Business Publication Editors. Email him at mbacidore@putman.net or check out his Google+ profile.

9.7-in industrial HMI with TFT display

- 32-bit RISC Cortex-A8, 1GHz
- 262K color display
- Ultra-slim form
- Moisture-resistant PCB coating
- Analog resistive touchscreen
- 1024 x 768 pixel high-resolution TFT
- 512 MB Flash memory, 256 MB RAM
- 1 Ethernet port, 1 CANbus (HMI5097XL only)
- 3 serial ports, 1 USB host port



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