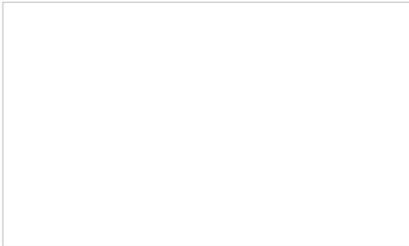


## Control by scroll and swipe gestures

Beijer Electronics (Germany) launched the iX operator panels with possible CAN-connectivity in three integrated series. The TxA (4,3-inch to 10-inch), TxB (7-inch to 15-inch) and TxC (12-inch to 21-inch) series are dedicated for small to large-sized HMI (human-machine interface) applications.



THE HMIs MAY BE USED FOR CONTROL APPLICATIONS, remote access, audit trail, trend charts generation, etc. The device is customizable using the C# scripting or 3rd party objects. TxB and TxC series allow viewing of Internet Explorer or of PDF files. Windows 7 operating system and run-time vector-based scalable graphics are available on the TxC panels. The application memory ranges from 80 MiB (TxA) through 1,4 GiB (TxB) up to 64 GiB (TxC). Respectively, the 400-MHz ARM9, the 1,1-GHz Intel Atom and the Intel Icore processors are embedded. As memory expansion possibility an SD card slot or USB (TxC) interface are given.

The IP65-rated panels have a powder-coated housing of die-cast aluminum. The operation temperatures from -10 °C up to +60 °C are limited for TxB (to +50 °C) and for TxC (0 °C to +50 °C). CAN-communication module, EIA-232, EIA-485, Ethernet and USB ports are available. The larger series provide audio (3,5-mm headphone at TxB) or video (with Full HD support at TxC) interfaces as well. TxC also features a PCI Express slot, which may be used for WLAN, Novram memory module, or field-bus communication (e.g. Powerlink, Ethercat).

The presented operator panels are suited for the upgraded HMI software iX 2.0. Device's navigation tools allow controlling using scroll and swipe gestures. With the clear objects in iX 2.0 the operation requires a short introduction time. The panel usage is similar to this of mobile devices such as smart phones. The "Action menu" is used to display multiple menu groups, each containing its own sets of actions, which may be triggered in iX run-time from the action menu object. The device menu may be profiled in line with customer's machine or brand. Applications may be created with ready-to-use solid HMI objects. For specialized demands one may implement .NET components and create customized functionality through C# scripting. 14 different trend chart types may show statistics and reports in a clear and structured way. The trend charts are connected to Array tags and follow pre-defined 2-D and 3-D styles.

HMI solutions are in a state of change. Industrial user interfaces take inspiration from consumer-oriented products such as mobile phones, MP3 players, etc. with advanced 3D-style graphics, icon based navigation and controls. Presented HMI solutions support this mindset with embedded functionality and graphics providing intuitive user interfaces and an open platform architecture.

