biamp.

BIAMP CONTROL

Simplified control for
extraordinary experiences

CONTENTS

CONTROL PADS

TOUCH PANEL CONTROLLERS

TOUCH PANELS

CONTROL PANELS

SWITCHING RELAYS

PROJECT DESIGNER

University of Copenhagen - Copenhagen, Denmark

SIMPLIFYING CONTROL

Ideally, control interfaces should provide the flexibility for technology managers to customize experiences for the end-users who rely on AV solutions in conference rooms, learning environments, and presentation spaces.

For any type of office space, Biamp control solutions provide the right interface for all integrated AV hardware. We deliver easily configurable control products that empower professionals to simplify complex AV environments for those who depend on easy, reliable connections for every meeting, lecture, and presentation.

Plus, Biamp's Project Designer software gives AV integrators the easiest and most intuitive software for configuring our control interfaces — no coding required.

Jørgensens Hotel - Horsens, Denmark

CONTROL PADS

Impera controllers provide a robust platform for controlling equipment in meeting rooms and learning spaces of all sizes.

- Include on-board controllers; no external processor required
- Software-configurable via Project Designer software
- 4- and 8-button models available in EU, DK, US form factors
- Control devices via LAN, RS-232, IR, or GPIO
- Support email notifications for lamp/filter hours and warning

IMPERA ECHO

The Impera Echo control pad is easy to use, install, configure, and integrate into new and existing AV installations. It can be quickly configured and customized within Project Designer software making it a flexible and cost-effective control solution. The Impera Echo provides AV control suitable for presentation spaces, learning environments, and conference rooms.

- Supports up to 8 software-configurable buttons
- 1 bi-directional RS-232/IR port for third party control with feedback
- 1 uni-directional RS-232/IR port for third party control
- 3 GPIO ports

IMPERA ECHO PLUS

The Impera Echo Plus control pad is a compact, highly customizable AV control suitable for wall-mounting or installation in the EasyConnect tabletop cable management solution. It provides a simple and intuitive interface for presentation spaces, learning environments, and conference rooms, regardless of the type of equipment installed.

- Supports up to 8 software-configurable buttons
- Controls up to 2 third party devices over Ethernet
- 1 bi-directional RS-232/IR port for third party control with feedback
- 1 uni-directional RS-232/IR port for third party control
- 3 GPIO ports

IMPERA OSCAR*

The 4-button Impera Oscar control pad is well suited for classrooms and meeting rooms. It is a highly customizable and compact AV control solution that can be used in many spaces regardless of the type of equipment installed. The Impera Oscar provides an intuitive and simple interface that fits the needs of many locations.

- Supports up to 4 software-configurable buttons
- 1 bi-directional RS-232/IR port for third party control with feedback
- 2 GPIO port
- Mini USB connection for system configuration and maintenance

*Available in EU and DK form factors only

IMPERA SIERRA II

The Impera Sierra II control pad offers uniform AV control in all rooms through an 8-button keypad with a built-in controller. It is suitable for wall mounting or installation in the EasyConnect tabletop cable management solution. The Impera Sierra II provides a compact and customizable interface for many rooms and learning spaces. Additionally, the Sierra II is capable of powering Apprimo touch panels.

- Supports up to 8 software-configurable buttons
- Controls up to 10 third party devices over Ethernet
- 3 GPIO ports
- Expansion Bus supports up to 5 additional devices (keypads and port expanders)
- Built-in web server
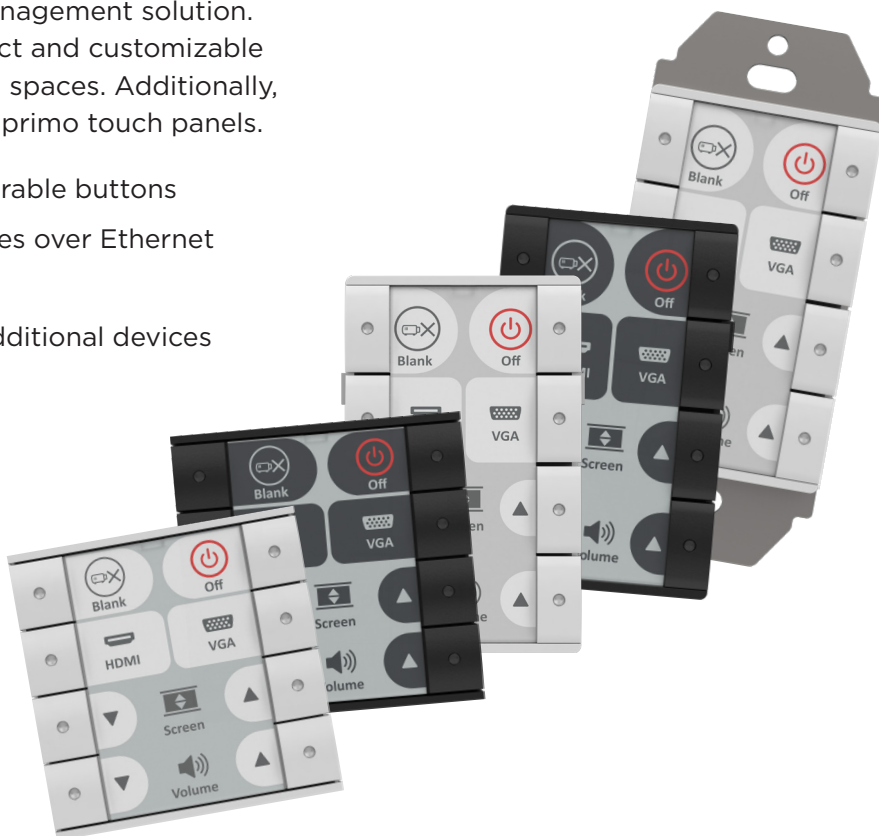
IMPERA UNIFORM

The Impera Uniform control pad has a modern minimalistic design with flexible mounting options making it a great option for any type of meeting space. It has an 8-button keypad with LED lights and a paperless E-ink interface that can be configured and customized using Project Designer. The Impera Uniform provides a compact and intuitive interface that will fit any conference room, learning space, presentation space, and more.

- Supports up to 8 software-configurable buttons
- 2.7-inch high contrast E Ink display
- 1 bi-directional RS-232 port for third party control with feedback
- 2 uni-directional RS-232 ports for third party control
- 3 GPIO ports
- Expansion Bus supports up to 8 additional devices (keypads and port expanders)
- PoE powered (IEEE 802.3at Class 1, 4W) for simple, single CAT5e/CAT6 cable installation
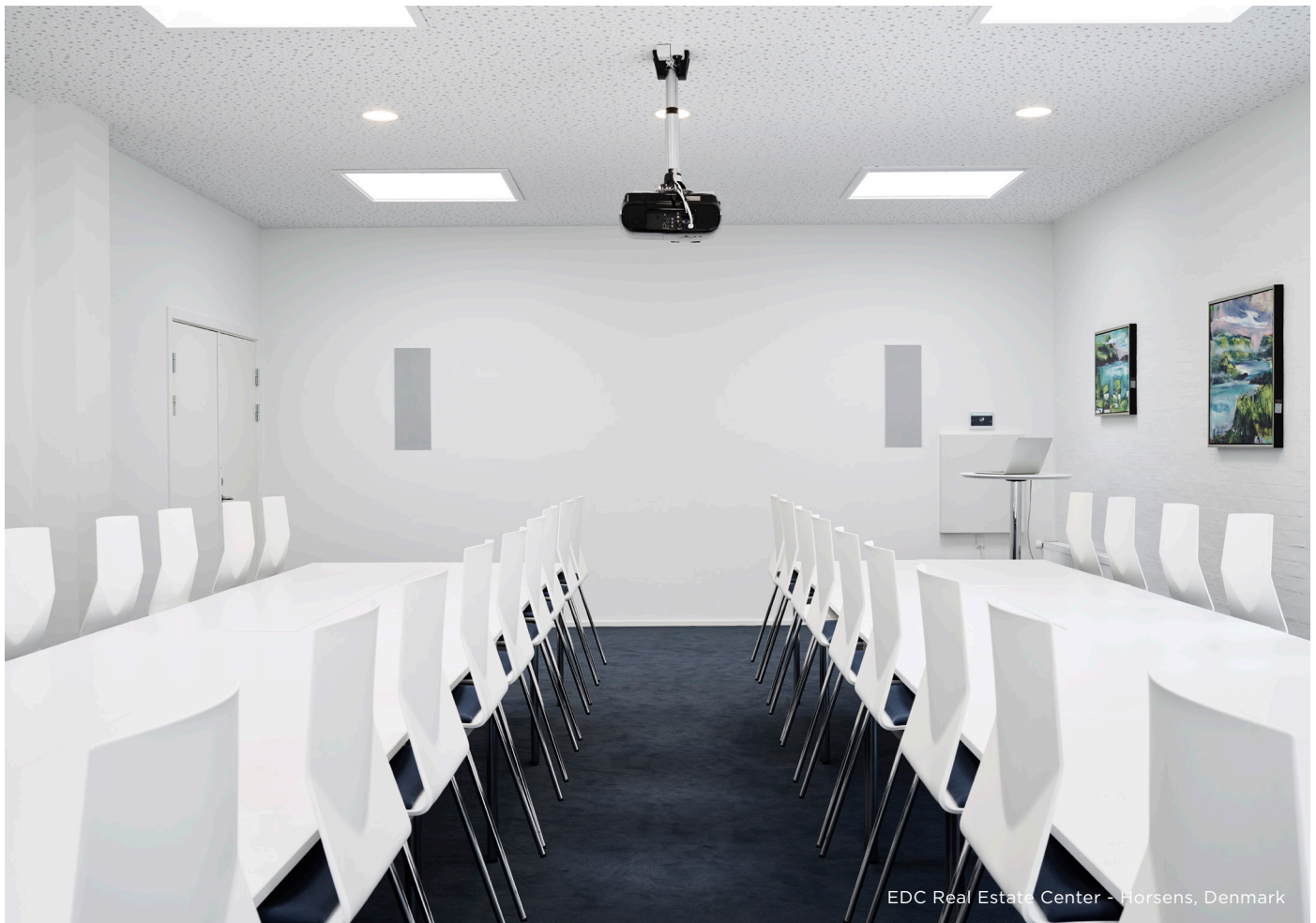
EDC Real Estate Center - Horsens, Denmark

TOUCH PANEL CONTROLLERS

- Serve as controllers for Apprimo touch panels
- Software-configurable via Project Designer software
- Multiple control options available: LAN, RS-232, IR, or GPIO
- Include built-in assignable relays
- Broad offering of capabilities to match a variety of room requirements

IMPERA ALFA II

The rack-mountable Impera Alfa II serves as a controller for Apprimo touch panels, providing easy control of all room functions and enabling support for multiple rooms simultaneously.

The Alfa II is equipped with three bi-directional RS-232 interfaces for sending commands to AV devices with feedback functionality. It is additionally equipped with two uni-directional RS-232 interfaces for sending commands to AV devices using serial or infrared communication. 24 GPIO are available for control of relays, switches, and sensors. With its large offering of control interfaces, Impera Alfa II is a versatile AV control system for rooms of all sizes.

- 3 bi-directional RS-232 ports or 6 IR ports
- 2 uni-directional RS-232 ports or 4 IR ports
- 4 built-in assignable relays
- 24 GPIO for control of relays, switches, and sensors
- Supports automatic timer functions
- Email notifications for lamp/filter hours and warnings
- Built-in web server

IMPERA LIMA

The Impera Lima is an ideal match for simpler room set ups. It connects to all devices seamlessly making it easy to control all room functions. Its small size and PoE feature make for very easy installation, with minimum cabling and installation time.

The Lima is equipped with two bi-directional RS-232 interfaces for sending commands to AV devices with feedback functionality. 2 GPIO are available for control of relays, switches, and sensors. Impera Lima is a flexible AV control system for huddle rooms and small conference rooms.

- 2 bi-directional RS-232 ports or 4 IR ports
- 2 built-in assignable relays
- 2 GPIO for control of relays, switches, and sensors
- PoE powered (IEEE 802.3at Class 3, 15W)

IMPERA TANGO

The Impera Tango is a powerful touch panel controller enabling intuitive touch control for Apprimo touch panels. It enables a fully customizable user interface via Project Designer software to give users a clear, reliable starting point for presentations, lessons, and beyond.

The Tango is equipped with three bi-directional RS-232 interfaces for sending commands to AV devices with feedback functionality. It is additionally equipped with 2 uni-directional RS-232 interfaces for sending commands to AV devices using serial or infrared communication. 8 GPIO are available for control of relays, switches, and sensors. Impera Tango is an adaptable AV control system for medium and large conference rooms.

- 3 bi-directional RS-232 ports or 6 IR ports
- 2 uni-directional RS-232 ports or 4 IR ports
- 4 built-in assignable relays
- 8 GPIO for control of relays, switches, and sensors
- PoE powered (IEEE 802.3at Class 3, 15W)

TOUCH PANELS

Offering enhanced flexibility in room control and nearly unlimited options in UI design, the Apprimo line of touch interfaces makes it simple to configure, operate, and manage AV equipment in complex spaces. Featuring touch panels in a range of sizes, the Apprimo line enables the customization necessary for truly optimized room environments.

- Several UI design templates and themes available in Project Designer software
- Customizable user interface to fit customers' control requirements and corporate identity
- Screen turns on automatically as someone approaches
- Display brightness can adjust automatically to the ambient light level
- PoE powered

APPRIMO TOUCH 4

The Apprimo Touch 4 is a 4" touch panel intended for smaller rooms. Similar in size to a smartphone, the Apprimo Touch 4 feels familiar and intuitive to use.

It is PoE powered and includes PIR sensors that turn the screen on automatically and adjusts the screen brightness based on the ambient light level of the room.

- 4" capacitive touch LCD interface
- Scratch-resistant glass
- Fits standard single gang US, EU, and DK back boxes
- Magnetic wall plate for easy installation
- PoE powered (IEEE 802.3at Class 2, 7W) for simple, single CAT5e/CAT6 cable installation
- Firmware can be updated via mini-USB port
- Operated by a separate Impera controller

APPRIMO TOUCH 7

The Apprimo Touch 7 is a 7" touch panel for any room that requires a more complex level of control, while still being a stylish and discreet interface that fits in any type of interior design.

It is PoE powered and includes PIR sensors that turn the screen on automatically and adjusts the screen brightness based on the ambient light level of the room.

- 7" capacitive touch LCD interface
- Scratch-resistant glass
- PoE powered (IEEE 802.3at Class 3, 15W) for simple, single CAT5e/CAT6 cable installation
- Firmware can be updated via mini-USB port
- Fits standard single gang US, EU, and DK back boxes
- Operated by a separate Impera controller
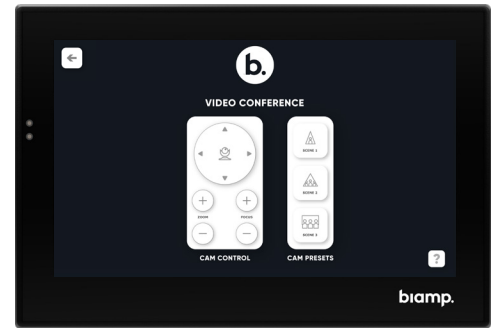
APPRIMO TOUCH 10

The largest touch screen in the Apprimo family at 10", the Apprimo Touch 10 supports the most control capabilities on a single screen. The sleek, well-designed touch screen is suited for applications ranging from boardrooms to multi-purpose spaces and beyond.

It is PoE powered and equipped with PIR sensors. An optional magnetic stand is available for mounting on a desk or tabletop.
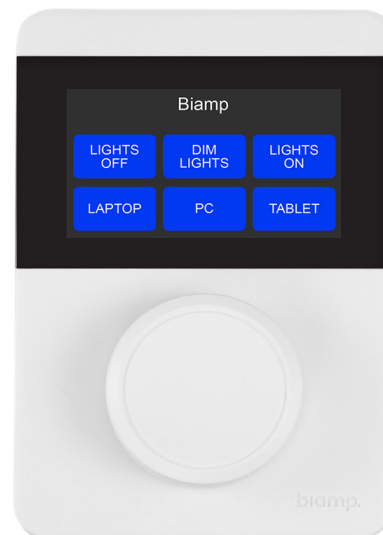
- 10" capacitive touch LCD interface
- Scratch-resistant glass
- Fits standard single gang US, EU, and DK back boxes
- PoE powered (IEEE 802.3at Class 3, 15W) for simple, single CAT5e/CAT6 cable installation
- Firmware can be updated via mini-USB port
- Operated by a separate Impera controller

APPRIMO TEC-X 1000

Easily identified by its signature rotary knob, the Apprimo TEC-X 1000 touch panel is an excellent room control for conference rooms of all sizes. It can be quickly programmed and customized within Tesira software as the needs of a room change over time, making the TEC-X 1000 a very flexible and cost effective control solution.

- Supports up to six buttons

- Capacitive touch LCD interface

- Dedicated rotary encoder for incrementing and decrementing level controls

- Control functions of onscreen buttons are easily programmed in Tesira design software

- PoE powered (IEEE 802.3at Class 3, 15W) for simple, single CAT5e/CAT6 cable installation

- Up to four devices can be daisy chained together

- Supports all TTP commands

APPRIMO TEC-X 2000

Distinguished by its modern design aesthetic, the Apprimo TEC-X 2000 touch panel provides simple, intuitive interfaces for presentation spaces and conference rooms via highly intuitive capacitive touch capabilities, delivered at the price of a keypad controller.

- Supports up to 12 buttons

- Capacitive touch LCD interface

- Control functions of onscreen buttons are easily programmed in Tesira design software

- PoE powered (IEEE 802.3at Class 3, 15W) for simple, single CAT5e/CAT6 cable installation

- Up to four devices can be daisy chained together

- Supports all TTP commands
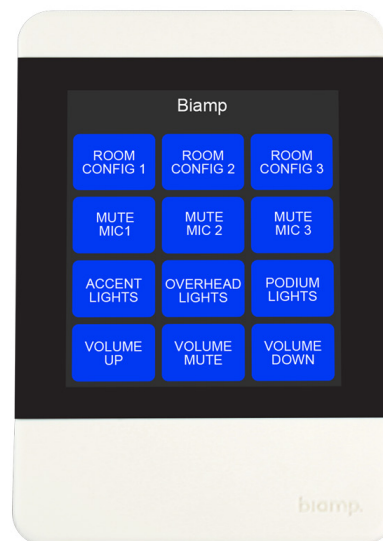
CONTROL PANELS

Our control panel offerings are designed for rooms requiring a more complex level of control, while still providing a stylish and discreet interface for any space. Fully configurable with Project Designer software, the control panel interface includes several themes and customizable templates to choose from.

APPRIMO TOUCH 8i

The Apprimo Touch 8i is an 8" control panel operated by an integrated controller capable of controlling up to 20 IP-based devices, allowing users to customize a solution that perfectly matches the customer requirements.

The user interface is fully configurable with Project Designer software, which includes several themes and customizable templates to choose from.

- Fits standard single gang US, EU, and DK back boxes
- Screen turns on automatically as someone approaches
- Display brightness can adjust automatically to the ambient light level
- Tabletop mount included
- PoE powered (IEEE 802.3at Class 3, 15W) for simple, single CAT5e/CAT6 cable installation
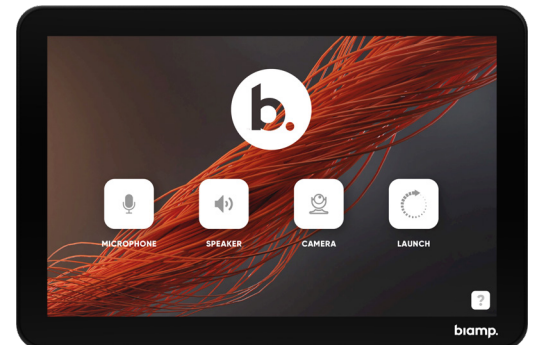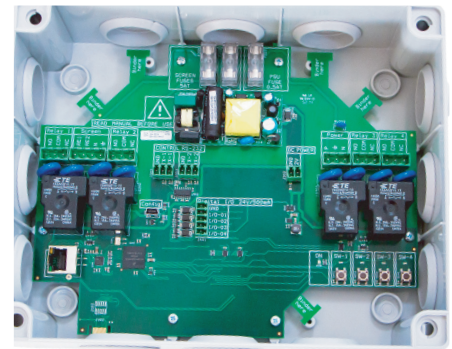
SWITCHING RELAYS

IMPERA SR-2

The Impera SR-2 is a two-relay unit designed for simple applications when only minimal switching is required, such as raising and lowering a screen. Control is via dedicated inputs, one for each relay, accepting control signals from an Impera controller. Separate high-voltage relay connections are provided, as well as a dedicated "screen mode" connection. Test buttons are provided for manual activation of relays, with LEDs for indication of relay state (open or pulled).
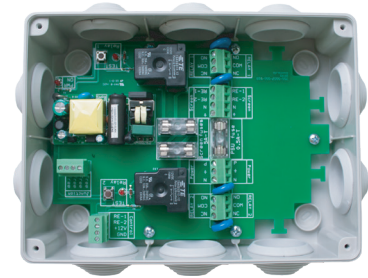
- Two relays assignable to screen mode or low voltage applications
- Dedicated connection mode for screen or projector lift
- Relays may be used for switching either high or low voltage
- Test buttons enable testing of relay functions during installation
- Installs quickly and easily in drop ceilings

IMPERA SR-4

The Impera SR-4 is a four-relay unit designed for applications of moderate complexity. Control is via dedicated inputs, one for each relay, accepting control signals from an Impera controller. Separate high voltage relay connections are provided, as well as a dedicated "screen mode" connection. Test buttons are provided for manual activation of relays, with LEDs for indication of relay state (open or pulled).

- Four relays assignable to screen mode or low voltage applications
- Dedicated connection mode for screen or projector lift
- Relays may be used for switching either high or low voltage
- Test buttons enable testing of relay functions during installation
- Installs quickly and easily in drop ceilings

IMPERA SR-8

The Impera SR-8 is an eight-relay comprehensive switching control for complex AV applications. Control is via dedicated inputs, one for each relay, accepting control signals from an Impera controller. The SR-8 is designed to facilitate seamless integrated control of projectors, audio and video sources, and audio mixing along with relay switching functions.

Separate high-voltage relay connections are provided, as well as test buttons for manual activation of relays, with LEDs for indication of relay state (open or pulled). All functions are easily programmable using Project Designer software, making the SR-8 a valuable solution for demanding applications.

- Eight relays assignable to high or low voltage applications
- Eight GPIO ports
- Test buttons with LED status enable testing of relay functions during installation
- LAN to RS-232 breakout which adds two additional RS-232 ports
- Supports daisy chaining for running up to 64 relays from one RS-232 port

PROJECT DESIGNER

Project Designer is our design software that enables easy configuration of any space.

From the smallest, simplest AV setup to large-scale, complex systems, it has all the functions needed to take a project from start to finish... all without needing to write a single line of code.

Pre-defined templates for many common control applications are included with Project Designer

Drag and drop software can be used to build entire control solutions without requiring any programming

With over 6000 device drivers, our extensive library covers a wide range of AV devices

Map the UI elements to the devices you want them to control

An advanced implementation for Tesira DSPs allows you to control presets, I/O blocks, logic states, and more

Use the companion Device Editor software to create additional device drivers

DATA TABLES
Control Pads

	Echo	Echo Plus	Oscar	Sierra II	Uniform
Button Quantity	8		4	8	
Button Type	Mechanical				
LED Indicators	Multi-color				
GPIO					
I/0 Quality	3		2	3	
Sense Low	< 1 VDC				
Sense High	> 4 VDC				
Output Type	Open Drain				
Max Voltage	24 VDC				
Max Current	0.5 A				
RS-232/IR					
Number of Ports	1 (bidirectional) 1 (undirectional)		1 (bidirectional)	1 (bidirectional) 2 (undirectional)	
Baud Rate	1200-115200 bit/sec				
Data Bits	7,8				
Parity	Even, Odd, None				
Stop Bits	1, 1.5, 2				
IR Frequency Range	381 Hz to 500 kHz				
No. of Devices Supported	2			5	8
Power	12V DC 5W				PoE (IEEE 802.3at Class 1, 4W)
Height/Width/Depth	Varies by form factor (DK, EU, US)				
Weight	0.20 lbs (90 g)				0.20 lbs (84 g)
Environmental					
Operating Temperature	32° - 104° F 0° - 40° C				
Relative Humidity	10-90%				
Altitude	0-6600 ft (0-2000m) MSL				
Compliance	CE Marked				
Ethernet					
Port Speed	n/a	10/100 Mbps			
Autosense	n/a	Yes			
Number of Ethernet Devices Supported	0	2	2	10	2
Display					
Display Type	Paper label				High-contrast 2.7" E ink display
Resolution	n/a				264 X 172 pixels
Color	n/a				Black/white

DATA TABLES
Touch Panel Controllers

	Alfa II	Lima	Tango
Network Connection	RJ-45 with Ethernet (CAT5e or better)		
RS-232/IR			
Number of Ports	3 (bidirectional)/2 (unidirectional)	2 (bidirectional)	3 (bidirectional)/2 (unidirectional)
Connector	3-pin, 0.3-inch Euroblock		
Baud Rate	1200-115200 bit/sec		
Data Bits	7,8		
Parity	Even, Odd, None		
Stop Bits	1, 2		
IR Frequency Range	400 Hz to 500 kHz		
GPIO			
Number of Ports	24	2	8
Connector	5-pin, 0.3-inch Euroblock		
Type	Open drain		
Input Trigger Low	< 1VDC		
Input Trigger High	> 4VDC		
Isolated Output	No		
Max Voltage	24VDC		
Max Current	0.5A		
Relays			
Quantity	4	2	4
Connector	3-pin, 0.3-inch Euroblock	2-pin, 0.3-inch Euroblock	3-pin, 0.3-inch Euroblock
Power Capacity	230VDC/8A	30VDC/0.5A	
Mains Power (100-240VAC, 50/60Hz)	< 60W	n/a	
PoE Power	n/a	IEEE 802.3at Class 3, 15W	IEEE 802.3at Class 3, 15W
Cooling	Convection		
Height/Width/Depth	1.7" x 19 " 5.6" 44 x 483 x 141 mm	1.4" x 8.7" x 2.8" 35 x 220 x 70 mm	1.4" x 8.7" x 2.8" 35 x 220 x 70 mm
Weight	4.2 lbs (1.9 kg)	1.1 lbs (0.5 kg)	
Environmental			
Operating Temperature	32° - 104° F 0° - 40° C	32° - 86° F 0° - 30° C	
Relative Humidity	10-90%		
Altitude	0-6600 ft (0-2000m) MSL		
Compliance	FCC Part 15B UL Listed CE Marked RoHS Directive		

DATA TABLES
Touch Panels and Control Panels

	Touch 4	Touch 7	Touch 10	TEC-X 1000	TEC-X 2000	Touch 8i
Display Type	LCD					
Display Size (diagonal)	4" (102 mm)	7" (178 mm)	10" (254 mm)	2.9" (74 mm)	3.8" (96 mm)	8" (203 mm)
Display Resolution	800x480	1024x595	1280x800	–	–	1280x800
Max. Display Brightness	400 nits	350 nits		–	–	350 nits
User Interface	Capacitive Touch Screen			Rotary Knob; Capacitive Touch Screen	Capacitive Touch Screen	
Status Indicator	n/a			RGB LED bar with adjustable brightness		n/a
Network Connection	RJ-45 with Ethernet cable (Cat 5e and above)					
Daisy Chain Length	n/a			4 devices max		n/a
Mini USB Port	USB 2.0			n/a		USB 2.0
Sensors	Proximity ambient light			n/a		Proximity ambient light
Controller Compatibility	Impera Alfa II Impera Lima Impera Tango Impera Sierra II			Tesira		n/a
PoE Power	IEEE 802.3at Class 2, 7W	IEEE 802.3at Class 3, 15W				
Height/Width/Depth	4.5" x 3" x 1.6" 115 x 77 x 41 mm	4.7" x 7" x 1.6" 120 x 180 x 41 mm	6.67" x 9.7" x 1.6" 169 x 246 x 41 mm	5.1" x 3.5" x 0.5" 130 x 90 x 13 mm		5.1" x 7.7" x 1.5" 130 x 196 x 38 mm
Weight	0.35 lbs (160 g)	0.73 lbs (330 g)	1.20 lbs (560 g)	0.35 lbs (159 g)	0.30 lbs (136 g)	1.0 lb (450 g)
Included Accessories	Mounting bracket and screws/ejector pin/ USB-OTG adapter/Polishing cloth			n/a	n/a	n/a
Environmental						
Operating Temperature	32° - 104° F 0° - 40° C					
Humidity	10-90%			10-95%		10-90%
Altitude	0-6,600 ft (0-2000m) MSL			0-10.000 ft (0-3000m) MSL		0-6,600 ft (0-2000m) MSL
Compliance	FCC Part 15B CE Marked UL and C-UL Listed RoHS Directive					

DATA TABLES
Switching Relays
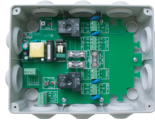
	SR-2	SR-4	SR-8
Power Supply	230 VAC		
Relay Load Max AC1	1150 W		
Relay Load Max AC15 (230 VAC)	500 W		
Relay Single-Phase Motor Rating (230 VAC)	370 W		
Relay Max Voltage	230 VAC		
Weight	1.5 lbs (700 g)	2.1 lbs (930 g)	4.4 lbs (2.0 kg)
Overall Dimensions			
Height	7.8" (197mm)	9.6" (245mm)	19" (483mm)
Width	5.8" (147mm)	7.7" (195mm)	5.6" (141mm)
Depth	2.8" (70mm)	2.8" (70mm)	1.7" (44mm)
Environmental			
Operating Temperature	32° - 104° F 0° - 40° C		
Humidity	10-90%		
Altitude	0-6,600 ft (0-2000m) MSL		
Compliance	CE Marked		