



ENGINEER
NEXT
NIDays

The logo is centered on a blue gradient background. It features the words "ENGINEER" and "NEXT" in a large, white, sans-serif font, stacked vertically. A yellow graphic element, resembling a stylized 'X' or a folded ribbon, is positioned between the two words. Below "NEXT" is a white rectangular box containing the text "NIDays" in a smaller, white, sans-serif font. The entire logo is tilted at an angle. The background is composed of several diagonal bands of color: a wide green band on the left, followed by orange, red, and yellow bands, and a series of blue bands of varying shades on the right.

Introducing NI ATE Core Configurations

Joris Donders

NI Field Marketing
Core Test & RF, Semiconductor

Joris.donders@ni.com

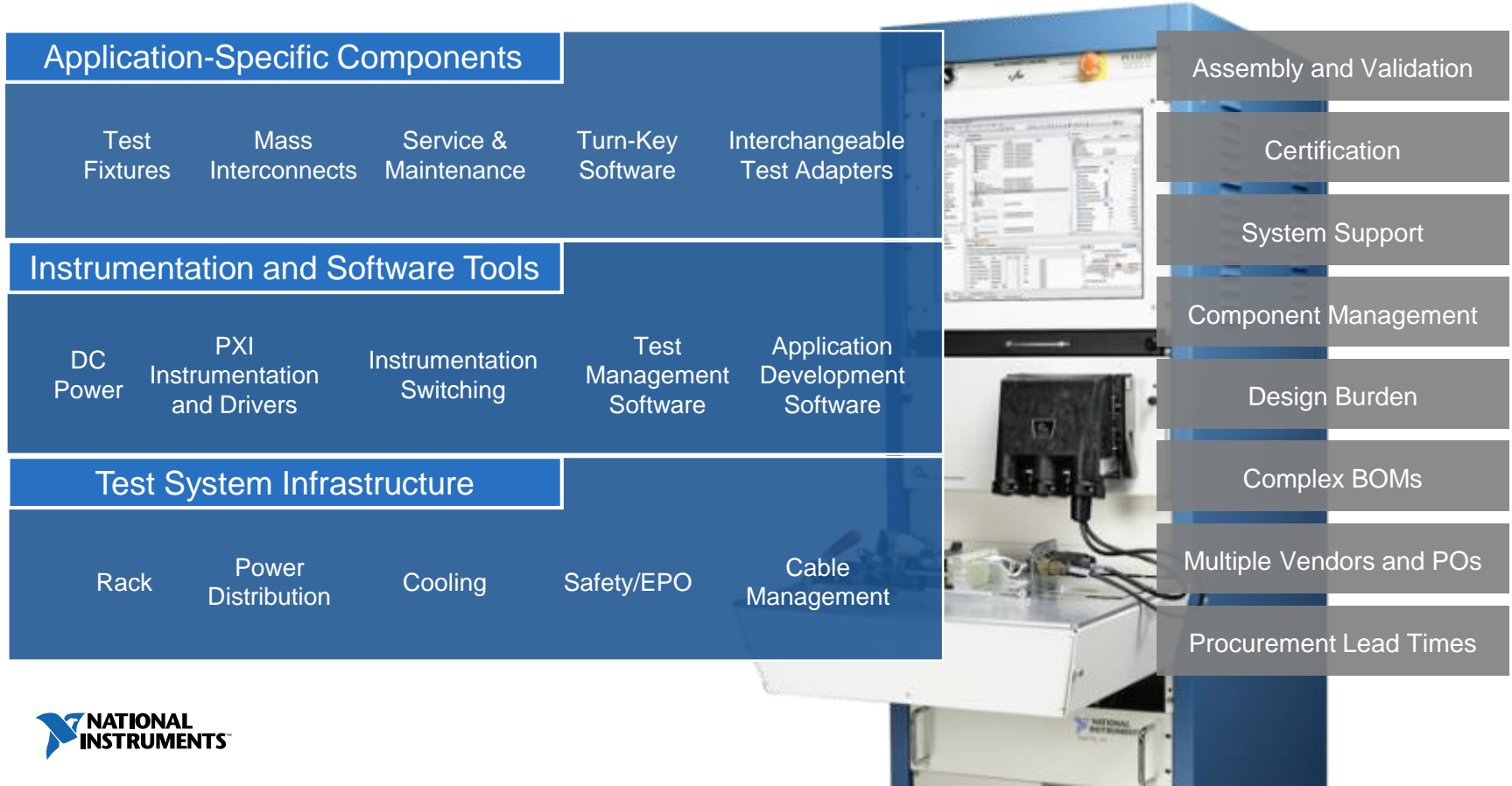
+32 474 43 31 96

Agenda

- ATE System Development: Then and Now
- Anatomy of an ATE Core Configuration
- Customizing Your ATE System
- System Completion and Deployment

ATE System Development: Then and Now

ATE Systems Require More Than Instrumentation





REAL-TIME TEST



“Through NI’s ATE Core Configurations, we were able to accelerate the design, procurement, and deployment phases of our project to arrive at a full solution much more quickly. The time and budget saved by starting with a standardized core infrastructure allowed us to focus on the design aspects unique to our application without reinventing the wheel.”



—Roy Walker, Business Unit Manager, Bloomy, Inc.
ni.com/innovations

Mechanical Infrastructure

Exterior Dimensions and Specifications

Model	Height (including casters)	Width	Depth	Max. Static Load	Caster Support ²
24U	53.26 in. (1,353 mm)	23.0 in. (584.2 mm)	31.5 in. (800 mm)	1,500 lb. (680 kg) ¹	<ul style="list-style-type: none">■ (4) Swivel■ 3.0 in. diameter■ 1,000 lb/caster■ Floor mounts (optional)
40U	81.55 in. (2,071 mm)	23.0 in. (584.2 mm)	31.5 in. (800 mm)	1,500 lb. (680 kg) ¹	<ul style="list-style-type: none">■ (4) Swivel■ 3.0 in. diameter■ 1,000 lb/caster■ Floor mounts (optional)

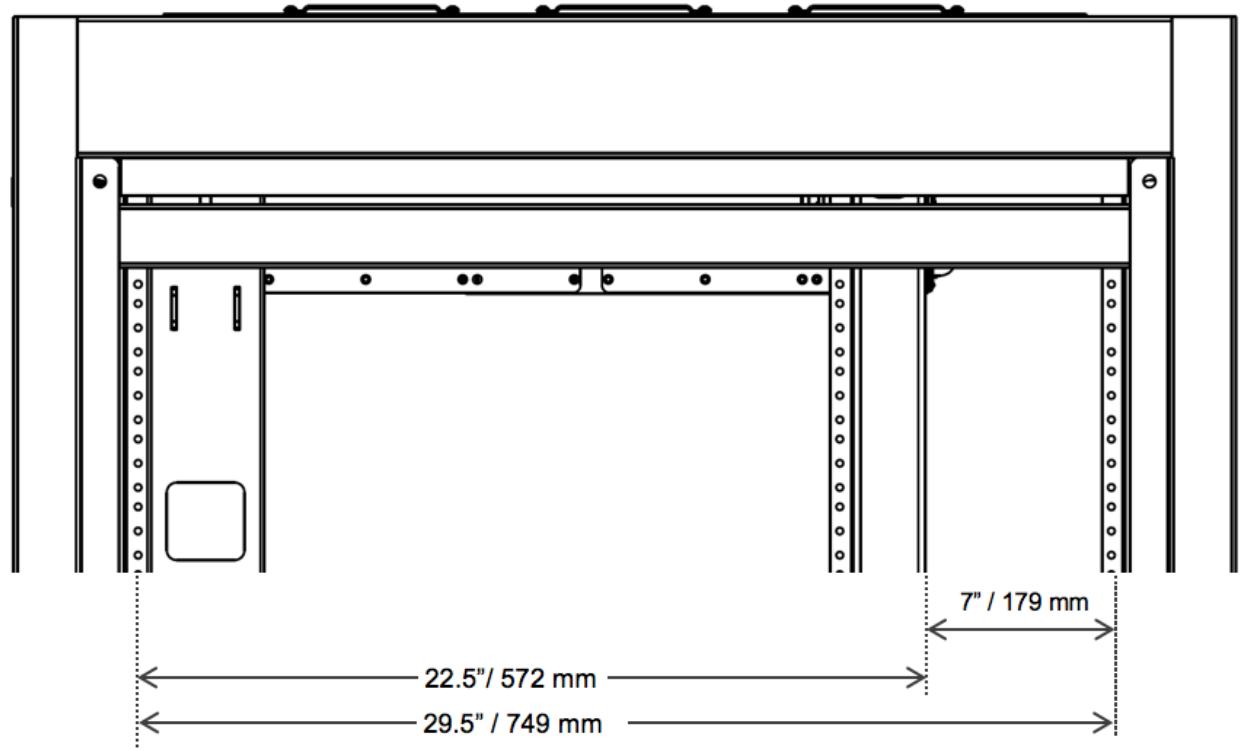
¹Tested to 2x for safety

²Further caster details are in the ATE Core Configurations data sheet

Mechanical Infrastructure

Three Sets of Mounting Rails

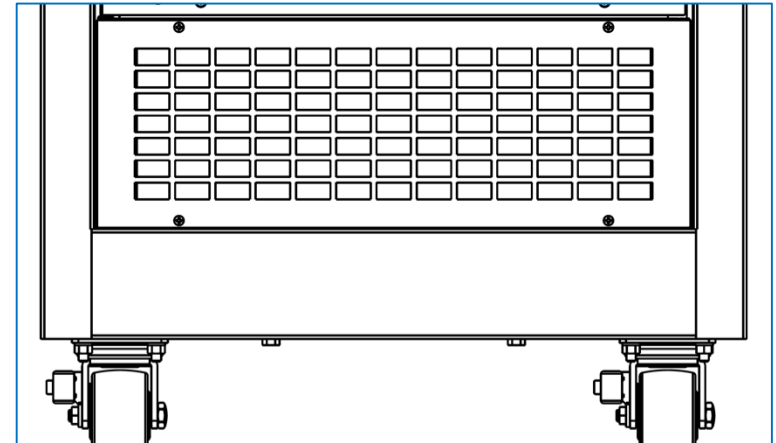
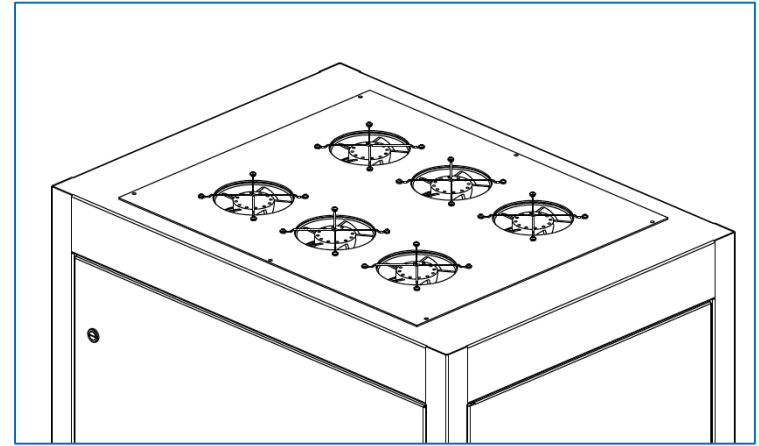
- Support for a range of mounting depths and configurations
- Integrated cable management tracks
- 10-32 threading



Mechanical Infrastructure

Air Flow

- Highly serviceable, integrated top-fan kits
- Options available for varying thermal loads
- Additional 1U fan kits available for targeted air flow
- DC power to fans provided by integrated PDU
- Integrated inlet panel to facilitate air flow
- Panel filters for harsh environments



NI ATE Core Configurations

Standardized Starting Point for ATE Systems

Mechanical Infrastructure

19" Rack, Removable Doors, 3 Sets of Mounting Rails

Power Infrastructure

Power Entry Panel, Power Distribution, Integrated Fans

Safety Infrastructure

Emergency Power Off, Temperature Monitors



Anatomy of an ATE Core Configuration

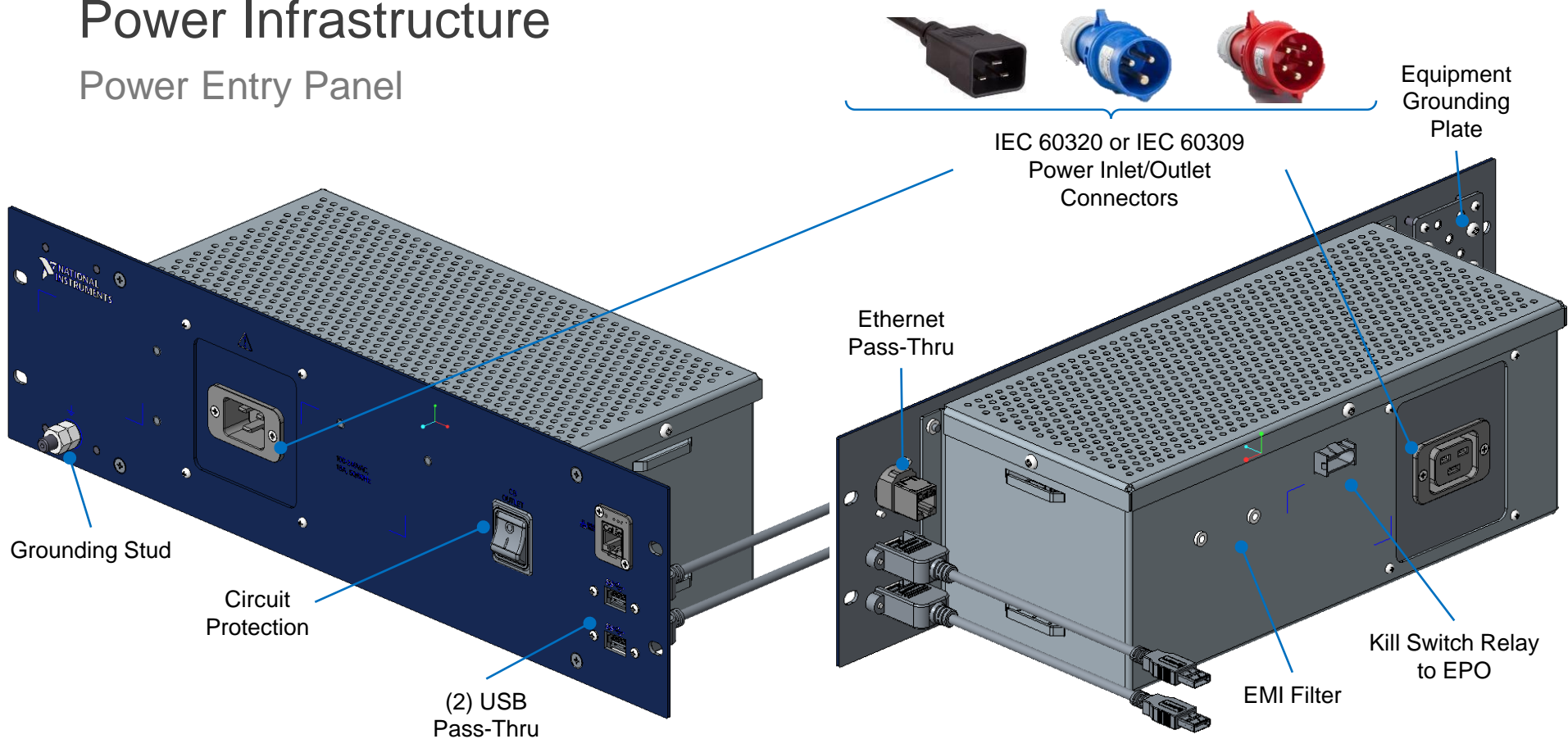
Mechanical Infrastructure

- Rear Locking Door
- Removable Side Walls
- Top Fan Kit
- Three Sets of Mounting Rails
- Cable Management Tracks
- Brushed Cable Inlet
- Filtered Air Inlet Panel
- Full-Rotation Industrial Casters



Power Infrastructure

Power Entry Panel



Power Infrastructure

Power Distribution Units

- Power distribution units allocate AC and DC power to instrumentation and rack components
- Co-developed with Marway to meet the needs of ATE systems
- Available for both single-phase and three-phase power systems
- Features include power sequencing, remote inhibit, and EPO connections

RMX-10050 Single-Phase PDU



RMX-10051 Three-Phase PDU



Safety Infrastructure

Emergency Power-Off and Thermal Shutdown

On/Off Switch

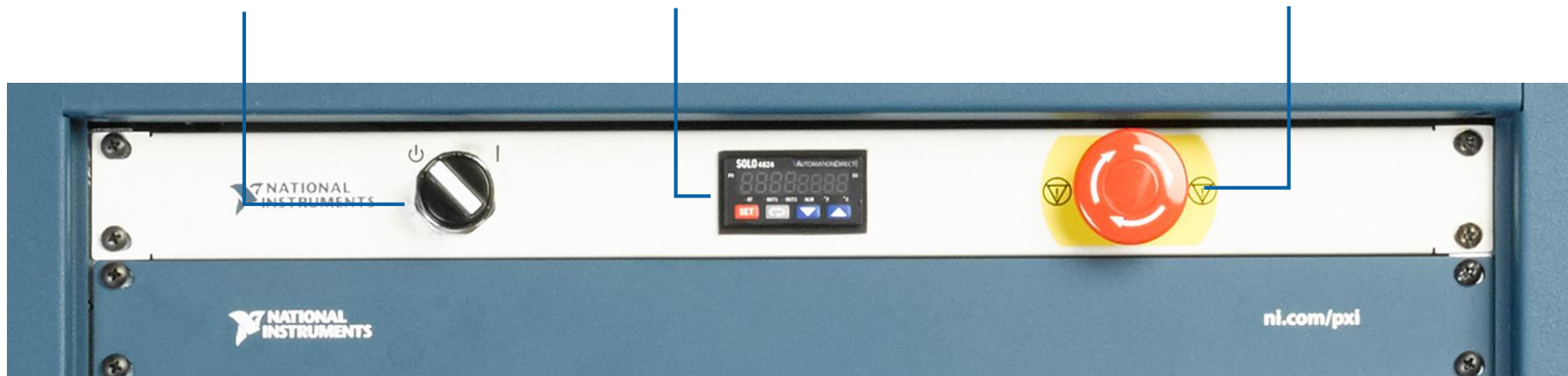
Enables/disables AC and DC power from PDU

Thermal Shutdown Switch

Kills facility power to system at user-defined temperature

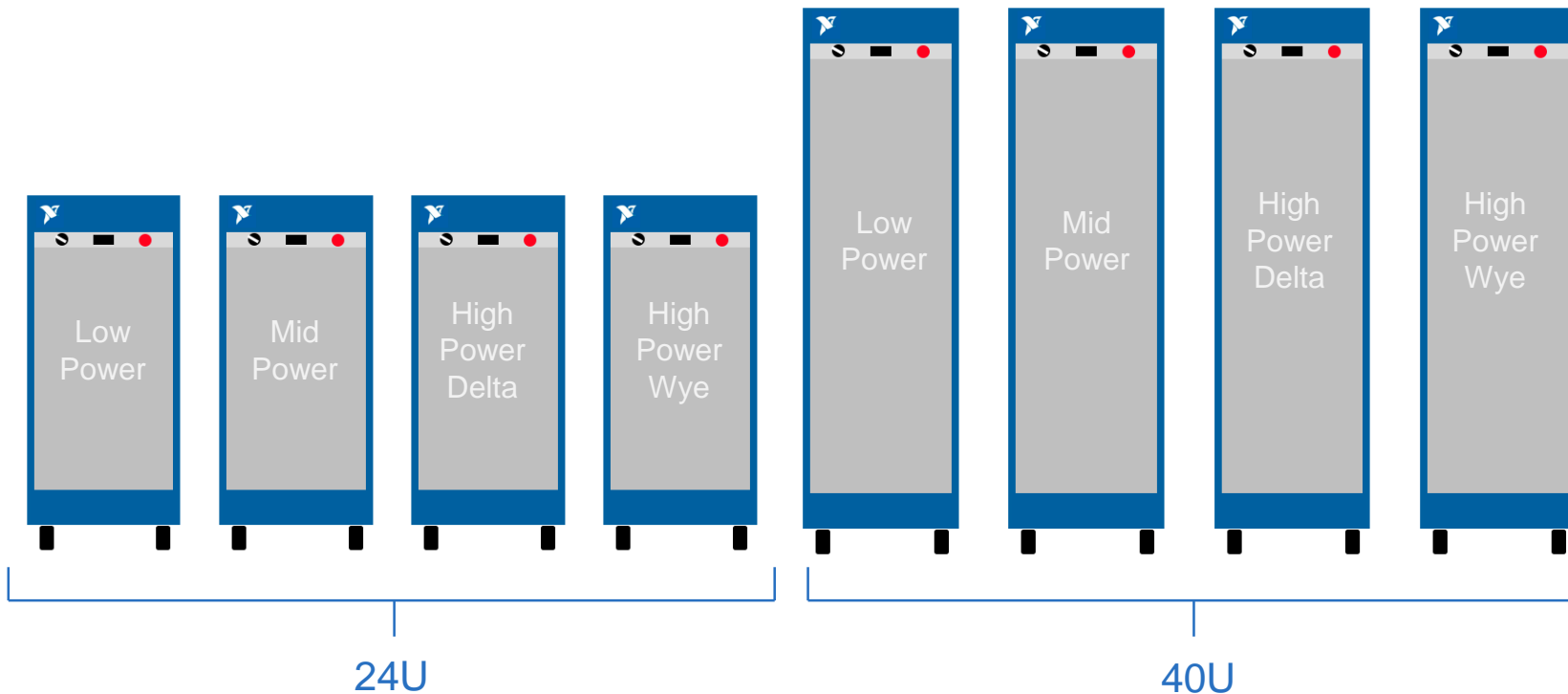
Emergency Power-Off

Kills facility power to the system when pressed



The Eight ATE Core Configurations

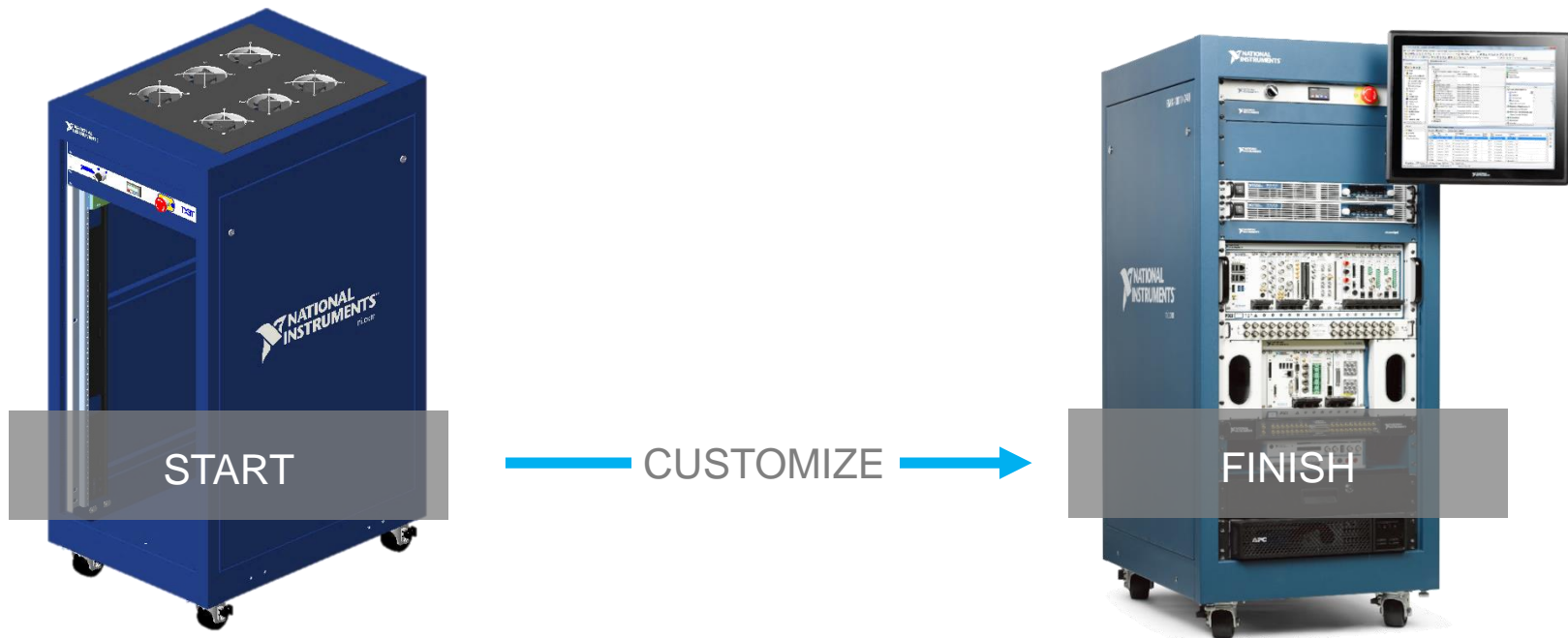
2 Height Options, 4 Power Profiles



Customizing Your ATE System

Standardized Core, Customized System

Outfit an ATE Core Configuration with Instrumentation and Accessories



Customize with Instrumentation, Accessories, and Software

INSTRUMENTATION



PXI



Switch Load and Signal Conditioning



CompactRIO

APPLICATION HARDWARE



RAID Arrays



Programmable Power Supplies



Rackmount Controllers

SYSTEM ACCESSORIES



MKD Units



Displays/HMIs



UPS

Flexible Display Options



1U Flip-Up Drawer

MKD-1117

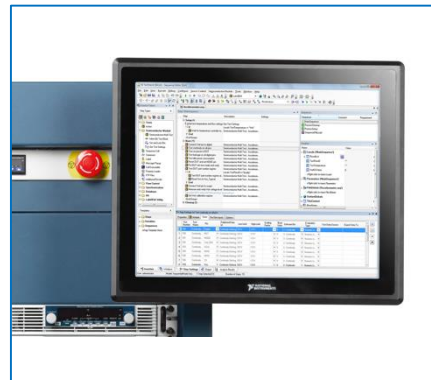
- 17" 1280 x 1024 LCD
- 105-key English keyboard and touchpad
- VGA, USB, PS/2 conn.



Flush-Mounted Touch Screen

TSM-1017

- 17" touch screen LCD
- 1280 x 1024 resolution
- Flush 10U footprint



Side-Mounted Screen

TSM-1017 or 22" Monitor

- 3U plate with mounting arm
- Options for 17" touch screen or 22" standard monitor

Accelerated Configuration

- The NI PXI Advisor expedites the configuration of ATE systems
- Add optional accessories such as uninterruptible power supplies, displays, filler panels, and spare components
- Position and orient your instrumentation and hardware accessories
- Add ballasts for a balanced system
- Get a system report providing the weight, size, power, and thermal details of your configuration

Currently NI internal – public release in development



✓ Controller Modules ✓ Chassis ✓ ATE Core Configuration Software ✓ Services Summary

✓ 1. ATE Core Configuration ✓ 2. Customize Rack Layout

You can change the selections based on your requirements. Click 'Next' to proceed.

Back Next

ATE Rack Accessories and Options

Chassis Placement		Price Per Unit
<input checked="" type="checkbox"/>	Rack Location 12U ▼	
<input checked="" type="checkbox"/>	Mounting Direction Front Rail ▼	
<input checked="" type="checkbox"/>	Alignment Flush ▼	

HMI Display		Price Per Unit
<input checked="" type="checkbox"/>	HMI Display Type 22" Flat Panel Monitor (3U, Adjustable Mounting Arm) ▼	\$ 465
<input checked="" type="checkbox"/>	Rack Location 21U ▼	

Mains Voltage		Price Per Unit
<input checked="" type="checkbox"/>	Mains Voltage Option 100-120V, 50/60Hz ▼	

Rack Accessories		Price Per Unit
<input checked="" type="checkbox"/>	RU24 Position EPO Panel and ENET Switch ▼	
<input checked="" type="checkbox"/>	RU23 Position High Power Distribution Unit ▼	
<input type="checkbox"/>	RU22 Position Occupied ▼	
<input type="checkbox"/>	RU21 Position Occupied ▼	
<input type="checkbox"/>	RU20 Position Occupied ▼	
<input type="checkbox"/>	RU19 Position Occupied ▼	
<input checked="" type="checkbox"/>	RU18 Position Empty Slot ▼	
<input type="checkbox"/>	RU17 Position Empty Slot ▼	
<input type="checkbox"/>	RU16 Position Empty Slot ▼	
<input type="checkbox"/>	RU15 Position Empty Slot ▼	
<input type="checkbox"/>	RU14 Position Empty Slot ▼	
<input type="checkbox"/>	RU13 Position Keypad for airflow ▼	
<input type="checkbox"/>	RU12 Position 1U Vented Shelf ▼	
<input type="checkbox"/>	RU11 Position 1U Fan Kit ▼	
<input type="checkbox"/>	RU10 Position Filler Panel ▼	
<input type="checkbox"/>	RU9 Position 1U Keyboard Drawer ▼	
<input type="checkbox"/>	RU8 Position 2U Locking Drawer ▼	
<input checked="" type="checkbox"/>	RU8 Position Equipment Support "L" Brackets ▼	
<input checked="" type="checkbox"/>	RU8 Position Empty Slot ▼	

Hardware Services

- Rack/ Accessories
- Rack Fan Kit
- Cables

Redundancy

Spares

*Customer
managed
spares*

NI Managed
Spares

*Partner with NI on a
tiered sparing model
at a location of your
choice*

Option in **Premium Plus
Service Program**

Advanced
Replacement

*Express shipment of a
replacement product
within one business
day of the request*

Included in the **Premium
Service Program** for HW

Standard
Repair

10 days for repair
plus standard
return shipping*

Included in the **Standard
Service Program** for HW

minutes

hours

1 day

3-5 days

2-3 weeks

System Completion and Deployment

Streamlined Deployment

- Minimized lead times through standardization
- Free, expedited global shipping
- Reusable shipping crates for multiple shipments
- Serviceability with certified subassemblies and field-replaceable components



NI Alliance Partner Network

1000+ Alliance Partners

NI Offices
NI Alliance Partners

Source: ni.com/findapartner





REAL-TIME TEST



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NI ATE Core Configurations



Faster Development

Standardized starting point for test system design



Simplified Procurement

Simplified BOM and vendor management



Flexible Configuration

Customized instrumentation and hardware



Streamlined Deployment

Expedited delivery and global certification



Learn more at
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