



STRONGARM®

Operator Interface Systems & Mountings



Welcome

These product categories have emerged from the designs and innovations developed through more than two decades of listening to our customers' needs. Each product is shown along with sample variations to assist in visualizing how the design may be adapted to your specific application.

As you'll see, there are many examples of stainless steel products that generally apply to two of our core markets: pharmaceutical and food processing. We have extensive experience in clean room designs and aggressive wash down areas. Also, there are many examples of painted steel and aluminum products that we've designed for the general manufacturing, military, transportation, OEM machinery, and healthcare markets.

"It's good to be different," particularly in our market. We're different because we don't just do specials...we embrace them. From environmental and ergonomic considerations to installation challenges and unique component choices, virtually every application has a few twists. And the reason we can be different? Because we do all the design, fabrication, finishing, and assembly in-house while drawing from our huge inventory of stock parts. We can tailor our products faster and more cost effectively than anyone, whether it's one of a kind or one thousand.

This catalog just skims the surface of what we've built. Tell us what you need to accomplish and you'll find that we've likely done it before. You will be surprised at the level of attention to detail and the superior quality of our finished product.

STRONGARM®

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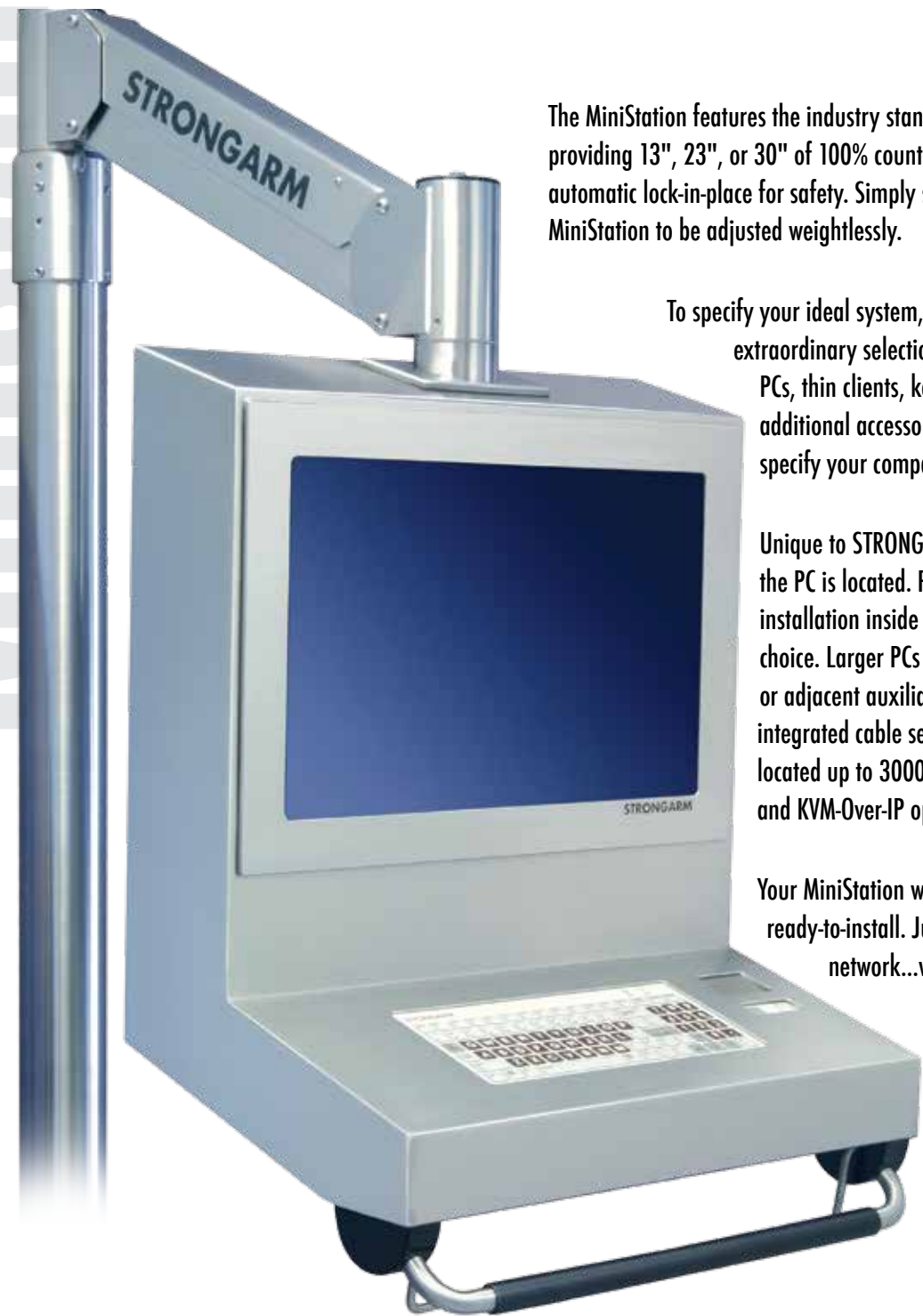
All Products are Proudly Made in America

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MiniStations™

These Compact Systems are Easily Repositioned for Operator Convenience, Ergonomics, and Installation Into Tight Spots



The MiniStation features the industry standard Vertica® arm mounting, providing 13", 23", or 30" of 100% counterbalanced vertical adjustment with automatic lock-in-place for safety. Simply squeezing the handle bale allows the MiniStation to be adjusted weightlessly.

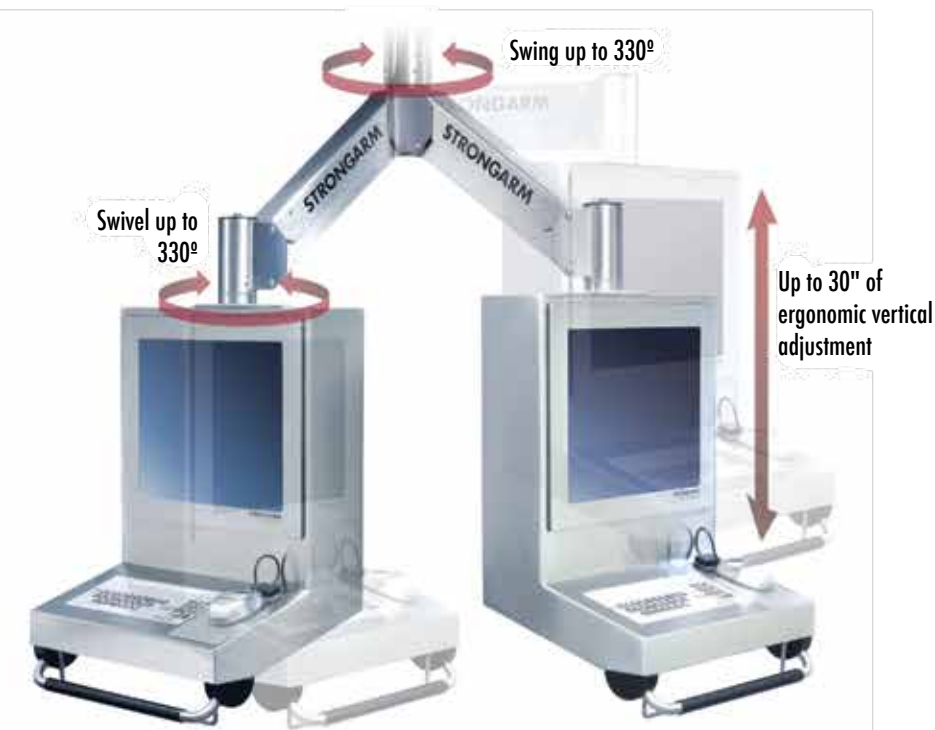
To specify your ideal system, mix and match from STRONGARM's extraordinary selection of displays, touchscreens, PCs, thin clients, keyboards, and pointers. Choose additional accessories from our robust collection, or specify your company standard.

Unique to STRONGARM systems is the choice of where the PC is located. For smaller PCs and thin clients, installation inside the display enclosure is a popular choice. Larger PCs are typically housed in an attached or adjacent auxiliary enclosure and connected with an integrated cable set. Adding a KVM allows the PC to be located up to 3000 feet away. We offer CATx, Fiber, and KVM-Over-IP options.

Your MiniStation will arrive pre-assembled, tested, and ready-to-install. Just bolt in place, run power, and network...we've taken care of the details.

NEMA 4X/IP69K stainless steel construction.

Articulation



Articulation of the standard Vertica arm, providing 13" of vertical travel, is ideal for ergonomics. The Vertica L and XL provide 23" and 30" of vertical travel respectively for special applications.

Additional Features



Cabling is in a safe and concealed passageway, maintaining the MiniStation's NEMA 4X rating.

Troubleshooting is a breeze; components are connected with standard cabling and mounted with laser cut brackets.



Sample Variations



Machine top mounted with both midjoint and vertical extensions to match the reach and elevation to the surface.



Floor post mounted with horizontal extension.



Also available in powder coated steel. We offer a variety of stock colors but provide custom colors as well.

MightyMount™

An Exceptionally Solid Work Platform That's Ergonomic



The MightyMount defines a category of its own. Easily differentiated from the slew of "computer store" grade mountings, the MightyMount is built like a piece of machinery using heavy duty components. While similar in outward appearance, its robust aluminum construction and simplified functionality is favored among OEMs and end-users alike.

Additional Features



The display and keyboard stay perfectly level throughout the 12" of counterbalanced ergonomic adjustment.

Flipping the side-mounted "lock-in-place" actuator secures the unit from drooping even under the user's weight.



Fold-up keyboard saves space when not in use, MightyMount stows to just 5" overall in depth.

← 5" →



One button to fold up



One button to fold down



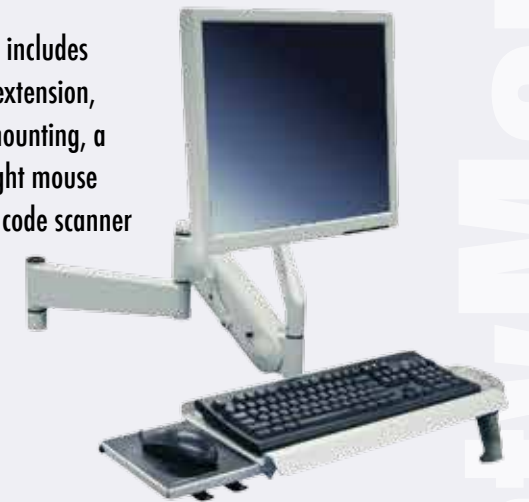
Standard cable manager

Loom-style cable manager

Stainless cable manager clips over and screws down securely. Loom style cable manager accepts a 7/8" diameter flexible plastic loom.

Sample Variations

This variation includes a horizontal extension, customized mounting, a sliding left-right mouse tray, and bar code scanner bracket.



Tight keyboard is ideal for "over top of work" areas.



Dual display variation features independent pivot adjustment of each display.



Mobile MightyMount features auxiliary PC enclosure for local PC

CleanMount

100% Cable Free Display and Keyboard Mounting



The CleanMount features an internal cable passageway, eliminating all external cables. In addition, it was designed with smooth, rounded surfaces, making the entire unit ultra-cleanable. The system provides multiple pivot points that allow the display and keyboard to be positioned wherever the user needs it.

The robust aluminum construction makes it extremely durable, making it right at home in environments ranging from clean rooms, industrial environments, and hospitals.

Additional Features

16" of counter-balanced vertical articulation.



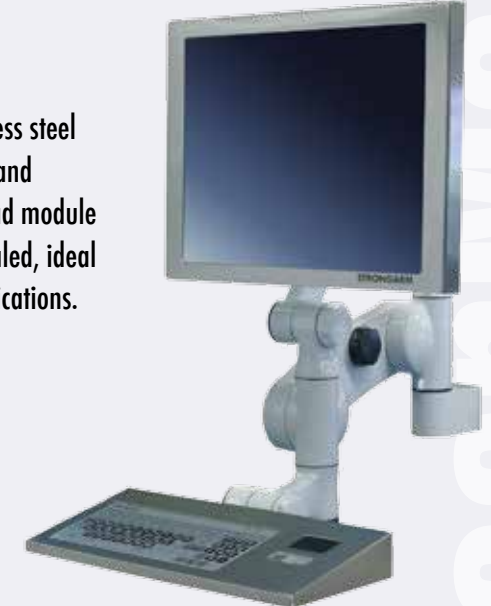
Folds to a compact 11" for convenient stowaway.



Optional track-mounted PC brackets and enclosures available to accommodate any PC or Thin Client.

Sample Variations

Ruggedized stainless steel industrial display and keyboard/touchpad module are completely sealed, ideal for industrial applications.



CleanMount PatientView model features an independently swiveling display for interactive viewing.

All models are also available in a variety of anti-microbial stock colors, custom colors are available as well.



CleanMount with dual VESA mount display bracket.

Mobile Stations

Enjoy the Benefits of Mobility



Mobile Stations offer flexibility and cost savings. One Mobile Station can be shared between process areas, particularly in cases where not all areas operate continuously or where the need for the computer is intermittent.

Every Mobile Station is outfitted specifically to the application, emphasizing compact size while providing the necessary capabilities.

Power options can be tethered AC, a UPS for temporary power while repositioning, or full battery power to run unconnected for a full shift.

On-board printing is a popular option, with choices ranging from bar code label printers to full sheet laser printers.

NEMA 4X/IP69K stainless steel construction.

Additional Features



Roll-out printer carriage simplifies label replacement.



Power selector/battery status is on the front panel in addition to direct viewing of power status on the side of the battery enclosure.



Inset pocket for the bar code scanner keeps it safe while in transit.

The battery is cradled between the casters, providing a low center of gravity for stability.



Sample Variations

Slimmer design is line cord powered.



Larger base for a high capacity UPS.



Mobile Station with X-Purge system.



Deeper system accommodates a full sheet laser printer.



Mobile Weigh Stations

Improve Efficiency, Bring the Scale to the Product



Mobilized product weighing has many applications; and batch pre-weighing is one of the most popular. Some installations wirelessly communicate with a remote batching computer to relay instantaneous operator instructions.

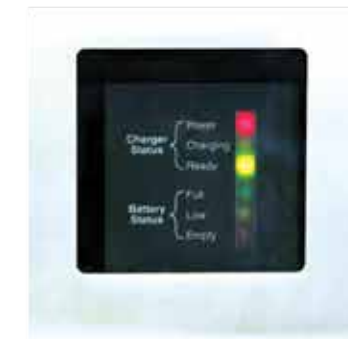
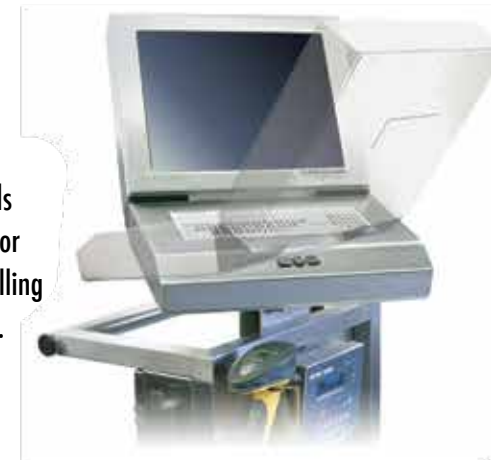
Mobile Weigh Stations vary dramatically in size and configuration and are individually configured to suit the scale size and accessories required.

Power options can be tethered AC, a UPS for temporary power while repositioning, or full battery power to run unconnected for a full shift.

NEMA 4X/IP69K stainless steel construction.

Additional Features

Display swivels to face scale for line-of-sight filling and weighing.



Direct viewing of battery power status located on the side of the battery enclosure.

Scale head conveniently mounted for operator use.



Sample Variations

Small scale variation.



Workspace design with small weigh scale and cabinet for large PC and additional components.

Front mounted scale head and integrated label printers.



Weigh scale, scale head interface, work surface area, and cabinets for the PC and additional components.

Dual scale version features smaller scale on top of removable trapezoid support, with larger scale underneath.



Suite-Stations™

Utilizes the Wall Cavity to Save Space While Providing Superior Cleanability



Eliminating intrusion into clean rooms is the hallmark of the Suite-Station. A wall cavity as shallow as 4" is sufficient. Our superior aseptic design satisfies the most rigorous cleaning requirements.

NEMA 4X/IP69K stainless steel construction.

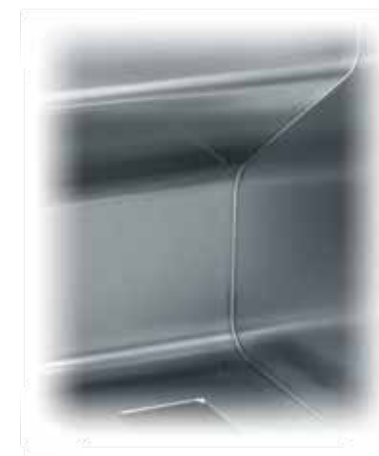
Additional Features

Aseptic display option provides superior cleanability by eliminating the ledge associated with traditional panel mount displays.



Precision milled beveled openings minimize buildup and aid cleaning.

Radiused insets facilitate cleaning by eliminating sharp three-surface corners.



Sample Variations



Optional removable keyboard module allows you to replace keyboard and pointer without breaking the integrity of the sanitary seal.

Keyboard module fastens to Suite-Station via sealed USB ports



Fold-up keyboard eliminates protrusion into the room.



Also available in powder coated steel. We offer a variety of stock colors but provide custom colors as well.



Wall Stations

Straight Forward and Easy to Install



The Wall Station can be easily sized to accept the user's choice of internal components. The Wall Station can be mounted with convenient wall tabs or through holes in the rear of the enclosure. The inset keyboard eliminates further protrusion into the work space.

NEMA 4X/IP69K stainless steel construction.

Sample Variations



Wipedown version features an aseptic display, sloped-top enclosure, inset door, and easily cleanable inset keyboard.

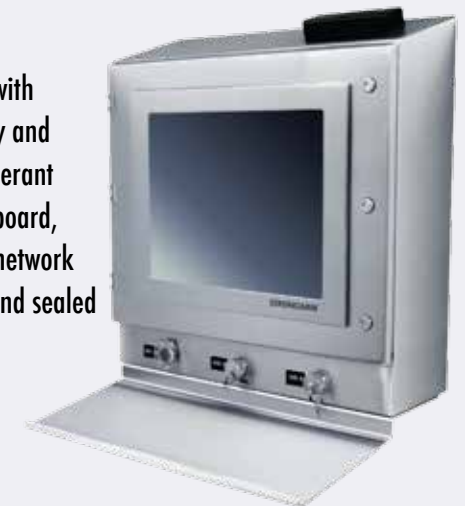


Unibody style enclosure with wedge keyboard, bar code scanner bracket, and sealed RF antenna.



Traditional wedge style keyboard module provides improved ergonomics for input intensive applications.

Wall Station with keyboard tray and washdown-tolerant ports for keyboard, pointer, and network connections and sealed RF antenna.



As an option, a VESA-mount desktop display can be installed behind a Lexan® viewing window on a swing-out bracket providing access to display controls.



Also available in powder coated steel. We offer a variety of stock colors but provide custom colors as well.

Roundtop MiniStation

Ultra Cleanable, Sleek, and Compact



The crevice-free, rounded design makes the Roundtop MiniStation ideally suited for clean areas. The rounded cableway arm maintains the system's extreme cleanability, and swivel adjustments on both ends make it easy to reposition.

NEMA 4X/IP69K stainless steel construction.

Additional Features

Sleek profile is compact with no hard edges.



STRONGARM



Can be configured with optional push buttons.

Rear door access to interior components



Sample Variations



E-Stop and pushbutton configuration.



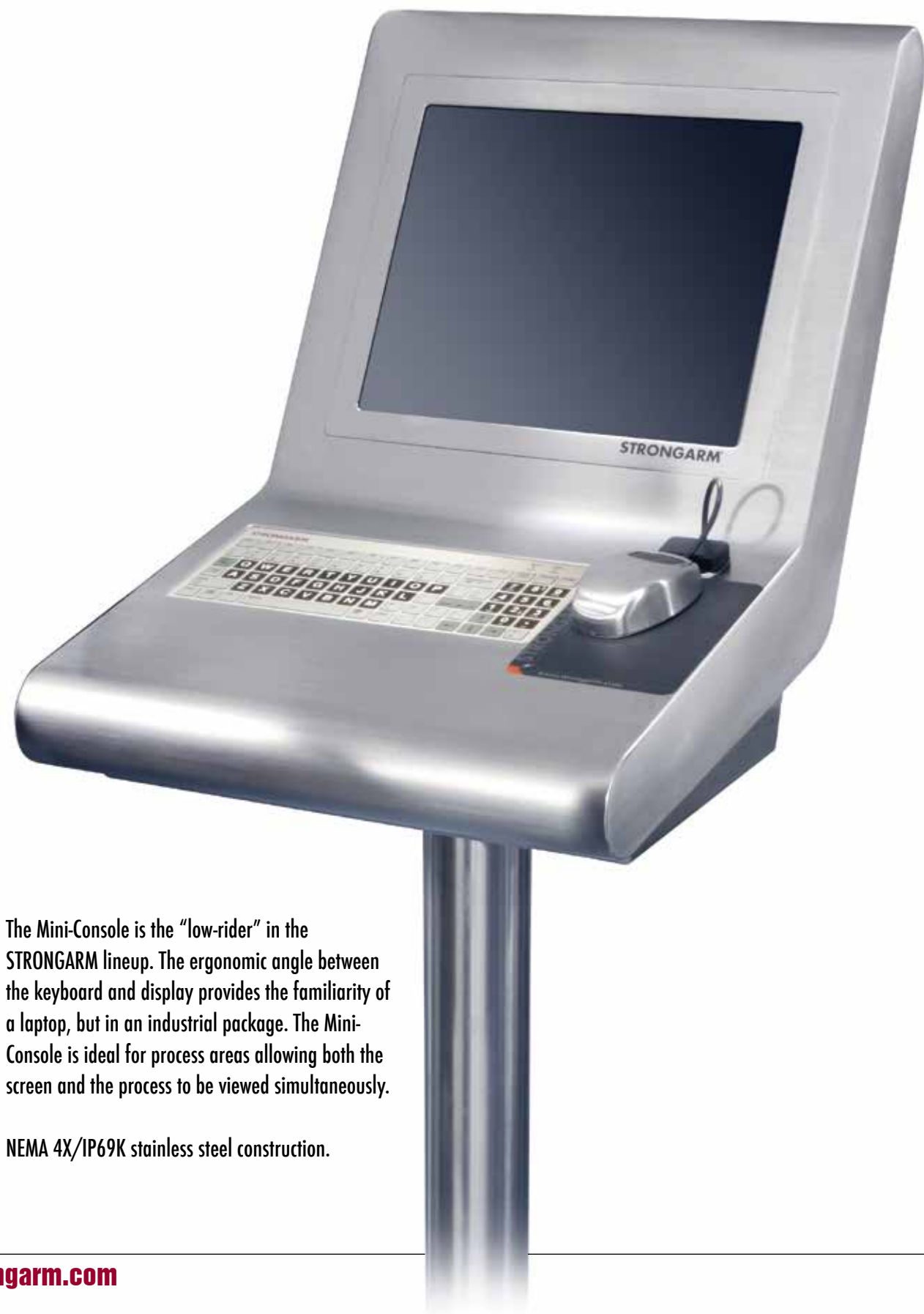
Small profile Roundtop MiniStation with rear-mounted display and multiple push buttons



Roundtop MiniStation with rear-mounted display for a superior cleanable exterior.

Mini-Consoles™

Console Height Systems for Exceptional Process Visibility



The Mini-Console is the "low-rider" in the STRONGARM lineup. The ergonomic angle between the keyboard and display provides the familiarity of a laptop, but in an industrial package. The Mini-Console is ideal for process areas allowing both the screen and the process to be viewed simultaneously.

NEMA 4X/IP69K stainless steel construction.

Additional Features



Flip-top access to integrated small form factor PC, thin client, or KVM.

Curved surfaces make the Mini-Console exceptionally easy to clean.



Removable rear panels allow for easy access to the display and display controls.

Sample Variations

Floor post mount with companion enclosure for PC.



Mobile Mini-Console with telescoping post for vertical repositioning.



Also available in powder coated steel. We offer a variety of stock colors but provide custom colors as well.

Pedestal Stations

Easily Installs Near Any Machine or Process Control Area



The Pedestal Station has a small footprint so it's easy to install your Operator Interface exactly where it's needed. The simple design is a favorite for multi-site rollouts, and is easily designed to accommodate a wide variety of components.

NEMA 4X/IP69K stainless steel construction.

Sample Variations



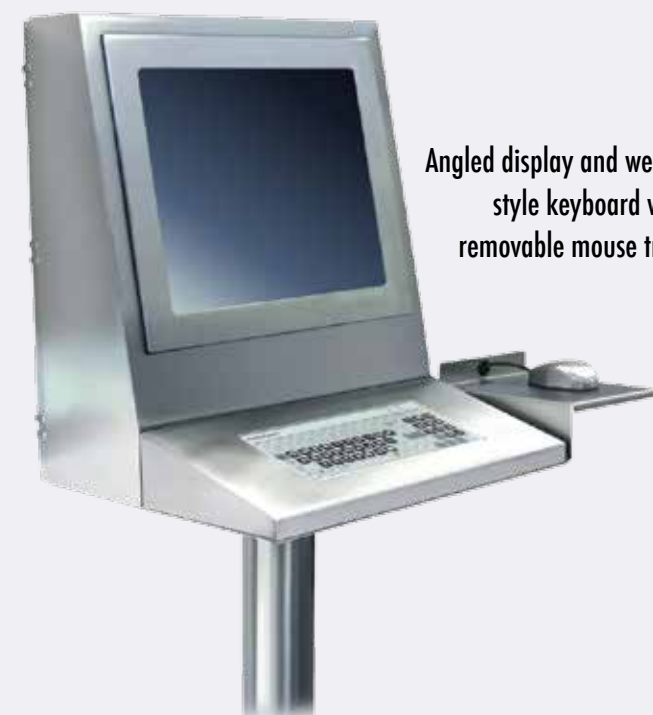
Hollow yoke mounting option allows display to be easily tilted with no exposed cables.



Swivel-top post with fixed tilt angle.



Also available in powder coated steel. We offer a variety of stock colors but provide custom colors as well.



Angled display and wedge style keyboard with removable mouse tray.



Front door access with integrated joystick pointer.

Large Format Display and Touchscreen Systems

Supersize Your Operator Interface Solution



Large Format Display Systems provide outstanding viewability for marquee graphics, digital signage, and a wide variety of other applications. These systems provide environmental and physical protection to ensure a trouble-free long life. The complete package can include a PC, Thin Client, or KVM, as well as thermal control.

NEMA 4X/IP69K stainless steel construction.

Additional Features

Front panel infrared control window permits remote operation of display without having to open the enclosure.



External ports allow you to connect components without opening the enclosure.

Choose from a variety of cooling devices to maintain internal operating temperature (thermoelectric cooler shown).



Sample Variations



Yoke mount option provides both tilting and turning for optimal repositioning, ideal for touchscreen applications.



Floor post mounting.



Also available in powder coated steel. We offer a variety of stock colors but provide custom colors as well.

Operator Interface Terminal Mountings

Built to Your Exact Terminal Specifications



Operator Interface Terminal Mountings are a convenient package of a perfectly sized enclosure and mounting of your choice. Every enclosure is designed to the minimum "space saving" size for the particular terminal, with consideration given to each one's unique requirements.

Additional Features

Side door provides necessary access to ports, drives, and other internal components.



Articulation of the standard Vertica arm, providing 13" of vertical travel, is ideal for ergonomics. The Vertica L and XL provide 23" and 30" of vertical travel respectively for special applications.

Cabling is in a safe and concealed passageway, maintaining the NEMA 4/12 rating.

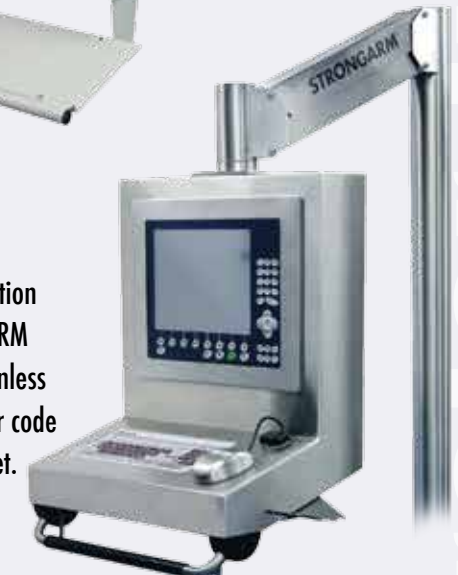


Sample Variations



Cableway mounted OIT with ergonomic keyboard tray.

Stainless variation with STRONGARM keyboard, stainless mouse and bar code scanner bracket.



Vertica XL arm with vertical extension and multiple push-button cutouts.

Hazardous Area Systems

All STRONGARM Systems are Available for Classified Areas



Our expertise is built into our Hazardous Area Systems. STRONGARM provides the widest range of hazardous safety options for use in systems subject to the presence of potentially explosive gases, liquids, or powders.

We offer multiple agency approved systems and safety assurance not available with do-it-yourself systems. STRONGARM provides the most current safety strategies for the best protection of people and processes. Customization permits you to strategically place an easily accessible operator interface system anywhere in your environment and still meet safety requirements.

Approvals offered:



Class I Division 2 up to Division 1
Class II Division 2 up to Division 1
Groups A, B, C, D

Sample Variations



Type X purged
Wall Station with
projected capacitive
touchscreen.



Type X purged
Suite-Station with
rear door access
permits servicing
from a
safe area.



Hazardous systems also
available in coated steel in
many stock and custom colors.

Outdoor Systems

Specifically Designed for Extreme Weather Conditions



These rugged systems are ideally suited for the increased demands of outdoor usage. Overhead canopies protect the operator and the system from the elements and direct sunlight. Component selections include LED HiBrite displays for improved viewing in outdoor environments and robust cooling options to protect internal electronics from extreme temperatures.

NEMA 4X/IP69K stainless steel construction.

Additional Features



Pre-wired to a convenient junction box.



Display enclosure easily tilts for ergonomic viewing.



Transfective and HiBrite display options are available for outdoor applications.

Sample Variations



Compact hazardous area pedestal system with rain shield.



Also available in corrosion-resistant primer-painted steel in many stock and custom colors.

Printer Enclosures

NEMA 4/4X Protection for Any Size Printer in Any Environment



Printer Enclosures are custom designed to your exact printer specifications, with doors and cutouts all integrated into the enclosure to provide full access to paper input/output, connections, and printer controls. Roll-out trays are also available to allow easier access to printer for maintenance, and the enclosure itself can be mounted to the wall, a floorpost, or as a free-standing unit.

NEMA 4X/IP69K stainless steel construction.

Sample Variations

X-purge pressurization for hazardous area applications, with integrated RF antenna.



Large form factor for bigger components, hinged top for easy access to interior.



Multiple door access and sloped top for easily cleanability.

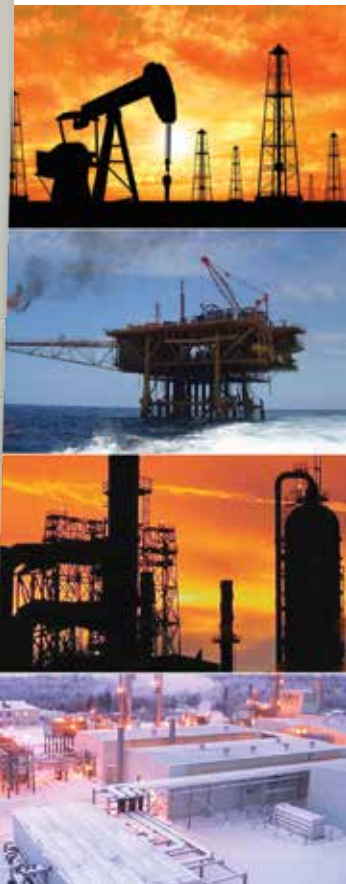


Oil & Gas Systems

Designed for the Rigorous Demands of the Oil & Gas Industries

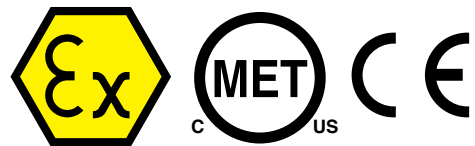
Vulcan Series

Ruggedized PanelPCs & Displays for Outdoor Use in Class I Div 2/Zone 2 and ATEX/IECEx Zone 2



Ruggedized and versatile enough for any onshore or offshore application, the Vulcan can withstand extreme environments ranging from -35°C to 60°C. The Vulcan PanelPC features an Intel i7, 3rd Gen, Dual-Core or Quad-core processor, while the VulcanView Display offers an optional hardened scratch-resistant GFG touchscreen. Both products have a 100mm VESA mounting pattern suitable for panel mounting or rig mounting.

NEMA 4X, IP66 Rating



Cabin Application Systems

STRONGARM's Mini-Station, featuring the industry standard Vertica adjustable pendant arm, is perfectly suited to address the operator interface requirements of cabin applications. The ceiling-mounted adjustable arms allow the operator to position the display exactly where needed, and can even be adjusted vertically to suit the operator's personal preference. The Mini-Station is perfectly counterbalanced, allowing for quick and effortless repositioning.



Completely customizable with wide range of display, keyboard, pointer, and accessory options.



Can be mounted to ceiling, wall, or post.



Fully articulating to allow operator to maintain clear line of sight.

Remote Terminal Station

Ergonomic, Cable-Free Solution for Thin Client-based Systems



The Remote Terminal Station features a tilting display that can be easily repositioned for optimal viewing. CAT5 and power cabling is routed through the compact yoke mounting, providing a cable-free, easily cleanable exterior.

NEMA 4X/IP69K stainless steel construction.

Free Standing Control Consoles

Self-Contained Workstations That Can Be Installed Anywhere



Designed specifically for the user application, these systems can integrate a wide variety of displays, keyboards, pointers, PCs, and accessories, and can also be configured with doors, integrated workspaces, and external ports to create the ideal workstation for any application.

Industrial Displays

Premium Quality STRONGARM-Built Displays in Virtually Any Format and Touchscreen Technology



- Wide variety of stock display sizes in standard and widescreen formats.
- Durable precision-milled stainless steel or aluminum bezels ensure long display life.
- Thick polycarbonate or safety glass viewing windows are shatterproof and scratch-resistant.
- Class I/Div 2 rated units available.
- HMI retrofit program keeps your systems current and up-to-date.



Additional Variations for Extreme Lighting Conditions



Transfective displays provide improved visibility for outdoor settings.

HiBrite displays are designed for high ambient lighting.



Industrial, Ruggedized VESA Mount Displays



Available in both powder-coated aluminum and NEMA 4X sealed Stainless Steel, these displays are well suited for the harshest industrial environments.



PCs, Thin Clients & Extenders

Many, Many Options Without Limitations



Featured Offering:

STRONGARM D7 Computer and TD Thin Client

- Manufactured and supported by Dell®
- Designed for use in high temperature locations.
- Eliminates need for additional cooling.
- Featuring the latest Dell Core Processor and CPU technologies.
- 3 Year on-site warranty.



Very Popular: B-Series Microbox PCs

- Available with a wide selection of processor, memory and storage configurations.
 - Compact, easy to deploy.
 - Intel® Pentium Processors.
 - 1 Year warranty.

Locate Your PC for Optimum Performance



Internal: Inside the operator interface enclosure.



Local: In a companion enclosure up to 100' away, typically mounted to the floor post as shown, with cabling running internally through the post.

KVM Extenders

KVM Extenders allow you to locate your PC up to 3000' away from the system and are ideal for hazardous, aggressive washdown, and clean rooms areas, where exposure to the system's interior components is undesirable. Extenders are also well suited for situations where PCs need to be remotely maintained.



Options include:

- Hi Resolution • Fiber
- USB • Dual access • DVI connectivity
- Audio, Serial/Audio, and Serial/Audio/Video configurations

Keyboards

Ergonomic, Durable, and Customizable

STRONGARM 96-Key Mechanical Switch Keyboard



(Actual size)

- Excellent Tactile Feel
Embossed keys and mechanical keyswitches provide user-friendly feedback.
- Ergonomic
Oversized QWERTY letters and numbers provide improved visibility, custom graphics also available.
- Optimized for Washdown/
Wipedown Applications
Completely sealed polyester overlay is impervious to aggressive washdown and harsh chemicals.

STRONGARM 114-Key Rubber Keyboard



(Actual size)

- Raised keys provide traditional keyboard-feedback for touch-typing applications.
- Heavy-duty rubber surface is completely sealed and durable enough for long-term industrial usage.

Sample Variations



96-Key mechanical switch keyboard with integrated optical trackball.



Custom 40 function-key mechanical switch keyboard.

Custom mechanical switch number keypad.



Stainless steel sealed USB keyboard module with integrated resistive touch pad.

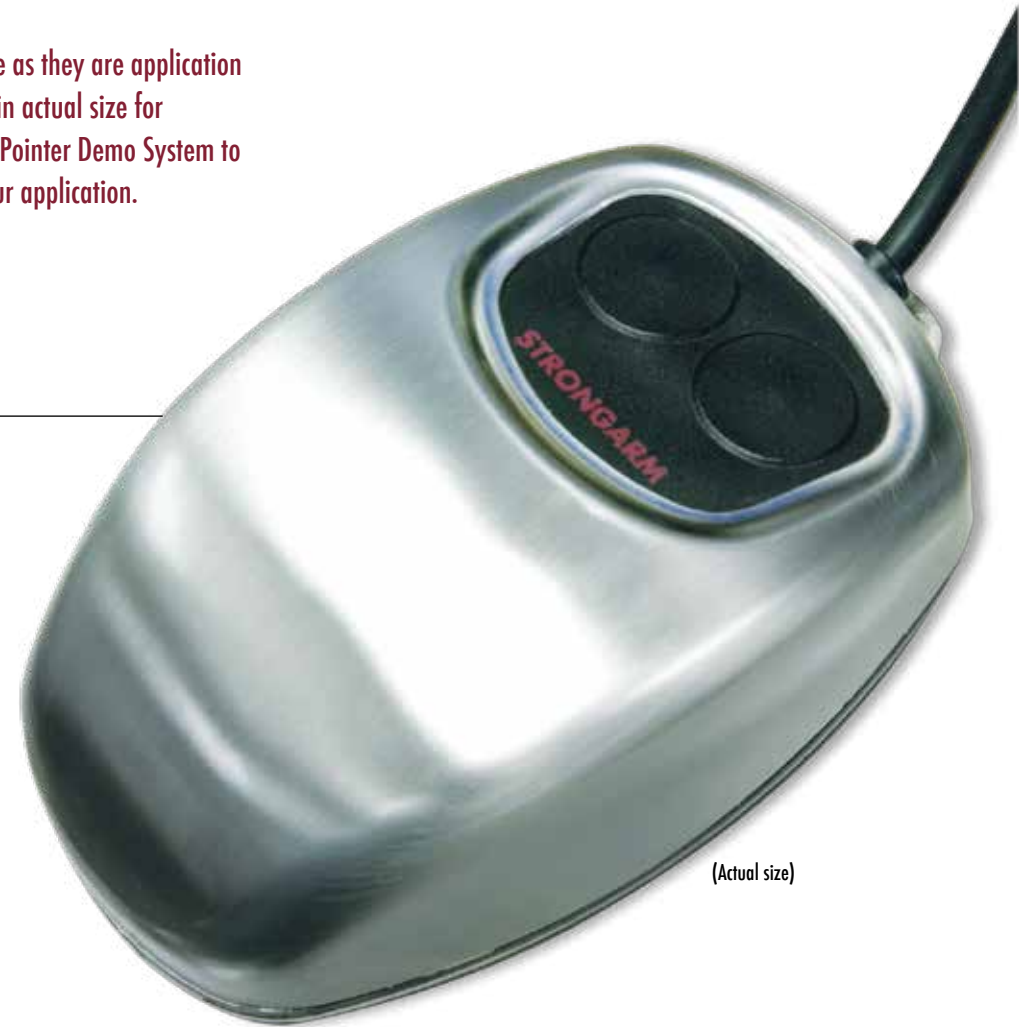
Pointers

Choose From a Large Selection of Proven Input Devices

Input devices are as much a matter of preference as they are application specific. Our pointer options are presented here in actual size for comparison. Better yet, you can request our live Pointer Demo System to decide which pointer option is best suited for your application.

Stainless Steel Mouse

- NEMA 4X Rated
Completely sealed, cleanable...even submersible
- Durable
316 stainless steel construction stands up to extreme conditions
- Tactile Feel
Sealed mechanical switch buttons provide interactive feedback



(Actual size)



- Ergonomic
The sleek, user-friendly profile brings the familiarity of a mouse to the industrial plant floor

Other Pointer Selections (all pointers shown actual size)



Resistive Touchpad with sealed buttons



Optical Trackball with sealed buttons



DuraPoint®



MicroModule®



Twin button joystick

Mounting Selections (NEMA 4X Stainless Construction)

For MiniStations and Operator Interface Terminal Mountings

Vertica® Arm Selections



Vertica:
13" of Vertical
Adjustment



Vertica L:
23" of Vertical
Adjustment



Vertica XL:
30" of Vertical
Adjustment

Cableway Arm



Standard
3" x 5" Profile



Small Profile
2" x 4" Profile

Arm Mounting Selections



Post Top Mount*



Wall Mount

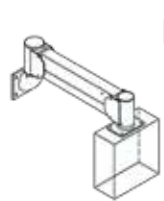


Wall Mount
with Coupling

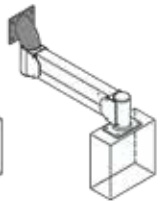


Machine Top Mount

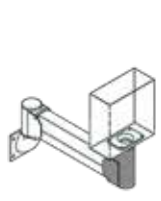
Configuration Selections



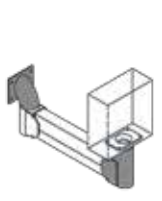
Standard



Inverted



Supported



Inverted/
Supported

Extension Selections



Horizontal Extension



Middle Joint Extension



Rigid Wall Mount Extension



Vertical Extension

*Floor Post Selections



Standard Floor Post with
12" x 12" plate



Gusseted Post with cut-outs
for cleaning



Conical Gusseted Post

Cable Entry



1 1/2" NPT female
conduit (other
sizes and locations
available)



Junction Box provides a "rough-
in" point and pull box for field
wiring of power and network
(shown with cover off)

Mounting Selections (NEMA 4/12 Aluminum Construction)

For MiniStations and Operator Interface Terminal Mountings

Vertica® Arm Selections



Vertica:
13" of Vertical
Adjustment



Vertica L:
23" of Vertical
Adjustment



Vertica XL:
30" of Vertical
Adjustment



Standard 3" x 5" Profile
Stock lengths: 16", 24", and 36"

Arm Mounting Selections



Post Top Mount**



Wall Mount

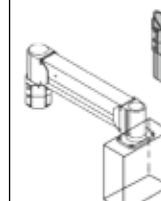


Blind Wall Mount

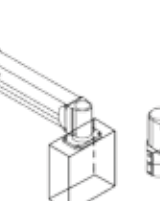


Machine Top Mount

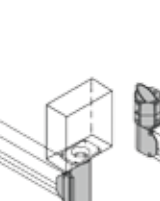
Configuration Selections



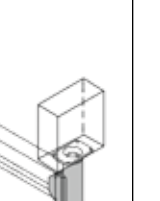
Standard



Inverted



Supported



Inverted/
Supported

Extension Selections



Horizontal Extension



Middle Joint Extension



Rigid Wall Mount Extension



Vertical Extension

**Floor Post Selections



Standard Floor Post with
12" x 12" plate



Machine Base Post
(fabricated to match your machine
dimensions)

VertiMax (Available in both NEMA 4X Stainless Steel and NEMA 4/12 Steel Construction)

The VertiMax is specifically designed for larger operator interface systems and enclosures. The VertiMax features 13" of vertical travel and up to 250 pounds of counterbalanced lift. The VertiMax also features a 2.5" diameter sealed cable passageway that protects cables, keeping them secure and twist-free.



Rapid Customization

Variations Are Our Specialty, Without the Cost or Lead Time



Visit our headquarters in suburban Philadelphia...



...or we'll bring our products to you.



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