

NETFORCE-12™

HARSH-ENVIRONMENT COMPUTER

Citadel NetFORCE-12™ rugged industrial computers deliver solid performance designed and engineered for challenging fixed and mobile applications.



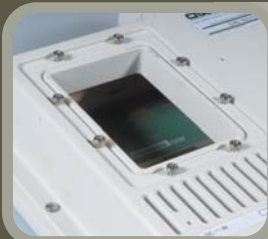
CITADEL™
NETFORCE



The NetFORCE Easy-access® port* supports removable wireless network, CARDBUS and ExpressCARD options:

- 802.11 b/g/n wireless network adapter
- Solid-state Compact FLASH slot
- Dual 32-bit CARDBUS I/O expansion
- ExpressCARD expansion slot

(*) - Tamper-resistant hardware closure



NetFORCE Expansion-port® supports NEMA-4 / IP-66 system enhancements with optional mini-PCI Express feature modules & shock-mounted IDE drive:

- External 90-dB alert horn
- RS-232 serial channels
- Analog & digital I/O
- GPS navigation
- Rugged mass storage expansion



Intelligent 24-60 VDC power system with internal battery back-up.

An optional 12-VDC power adapter supports installations on vehicles with traditional automotive power systems.

Rugged, sealed connectors certified to NEMA-4 / IP-66.



Optional connector safety interlocks support non-incendive certifications for use in hazardous environments.

Designed to:

- Class: I / Division: 2 (USA)



- Rugged industry-standard connectors
- I/O rated to NEMA-4 / IP-66
- Versatile standard VESA mount (75 mm pattern)
- FLEX-mount ball & arm (optional)



Rugged, harsh-environment NEMA-4 & IP-66 enclosure sealed with chemically resistant O-rings.

Sub-zero cold-start pre-heater and 'frost-free' display options ensure trouble-free low temperature operation.

SYSTEM OVERVIEW

Citadel NetFORCE-12™ rugged industrial computers deliver solid performance designed and engineered for challenging fixed and mobile applications.

These compact rugged platforms deliver reliable computing horsepower in a wide variety of harsh-environments. Their advanced CPU architecture, high-resolution 'glove compatible' touch screen, high-visibility sunlight-readable display and rugged, sealed enclosure provide an outstanding level of performance and operator convenience. A wide-input DC-power system with internal uninterruptible battery backup keeps your applications up-and-running.

NetFORCE™ systems withstand extremes of temperature, physical shock, vibration and environmental contaminants common to heavy industrial or weather-exposed settings.

- Advanced 64-bit CPU with integrated DDR2 DRAM support
- Single and dual-core processor options (depot upgradeable)
- Supports up to 4-Gbytes DDR2/800 system memory
- Scalable system clock options ranging from 800 MHz. to 2.4 GHz.
- High-performance integrated graphics controller
- Enhanced 12.1" SVGA display / 800 X 600 / 16-million colors
- High-resolution 'glove compatible' touch screen
- Sealed NEMA-4 / IP-66 enclosure designed to Class: I Division: 2
- 12/24 - 60 VDC power system with internal UPS battery back-up
- Industry standard 10/100/1000 Industrial Giga-bit Ethernet
- Easy access WiFi --- 802.11 a / b / g / n wireless networking
- Solid-state Compact FLASH and/or shock-mounted IDE disk drive
- Field accessible NetFORCE System Expansion-port™
- CardBUS, mini-PCI Express and ExpressCARD expansion ports
- Cold-start preheater and integrated 'no frost' display options

NETFORCE-12™

HARSH-ENVIRONMENT COMPUTER

Sealed NEMA-4 / IP-66 front bezel assembly

802.11b/g/n wireless, Compact FLASH, CardBUS & ExpressCard® slots

Optically enhanced high-visibility sunlight readable display

High-resolution 'glove-compatible' sealed touch screen

Display brightness controls & system activity indicators

Standard 75mm VESA-compatible mounting or FLEX-mount® ball & arm

Master 'SOFT' power ON/OFF for controlled system shut-down

System expansion: mini-PCI Express slot & shock-mounted IDE drive

NEMA-4/IP-66 power, keyboard, mouse, Gigabit LAN & dual USB

Rugged NEMA-4 / IP-66 system enclosure with O-ring seals

Dual RS-232 serial channels / NEMA-4 / IP-66 DB-9 connectors

Accessories include: cable strain-reliefs, connector caps and I/O cover

System Processor Options

AMD Advanced Sempron and Turion CPU's to 2.4 GHz.

System Memory

Up to 4-Gbytes DDR2 System DRAM

Optically Enhanced LCD Display & Touchscreen

Resolution: 800 X 600 SVGA (higher-res options)

Brightness: Enhanced / Sunlight readable options

Viewing Area: 12.1" diagonal

Touchscreen: High-resolution 'glove compatible'

Auto-blanking: Optional Safety & Security video blanking

Mass Storage and Networking

Solid-state Mass Storage:

Compact FLASH slot (Type-1, 2 & 3 compatible)

ExpressCARD slot (FLASH & I/O options)

Rotating Mass Storage:

Shock-mounted 1.8" ATA/IDE drive (optional)

Cabled & Wireless Networking:

802.11 a/b/g/n wireless adapter in CardBUS slot

Industrial Gigabit Ethernet 10/100/1000 (cabled)

Field-accessible System Expansion

Compact FLASH slot (Type-1, 2 & 3 compatible)

Dual 16/32-bit PCMCIA & 32-bit CardBUS slots

Mini-PCI Express slot (narrow & full-width supported)

Shock-mounted ATA/IDE drive bay

Dual USB Channels 3 & 4 support expansion modules

External 90+ dB Warning Horn (optional)

NEMA-4 / IP-66 Power & I/O Industrial Interconnects

DC-power

Keyboard & mouse

Industrial Gigabit Ethernet

Dual USB Channels 1 & 2

COM-1 / COM-2 and optional COM-3

Input Power Options

24 to 48 VDC (nominal)

12 VDC with optional mobile adapter

48 VDC & above (multiple high-voltage options)

90-220 VAC 50/60 Hz. Universal AC Adapter

Total Input Power: < 60 watts (maximum)

Environmental Specifications

Rating: UL50E Type-4 / NEMA-4 / IP-66

Temperature: -20 C to +50 C (operating)

Humidity: 0% - 95% (non-condensing)

Vibration: MIL-810F 2.0 G (15-1000 Hz.) (operating)

Shock: MIL-901 500 G / 2.0 ms (operating)

HAZLOC: Class: I / Div: 2 (optional configuration)

EMI/RFI: FCC Part-15 / MIL-STD-461E

Mechanical Specifications

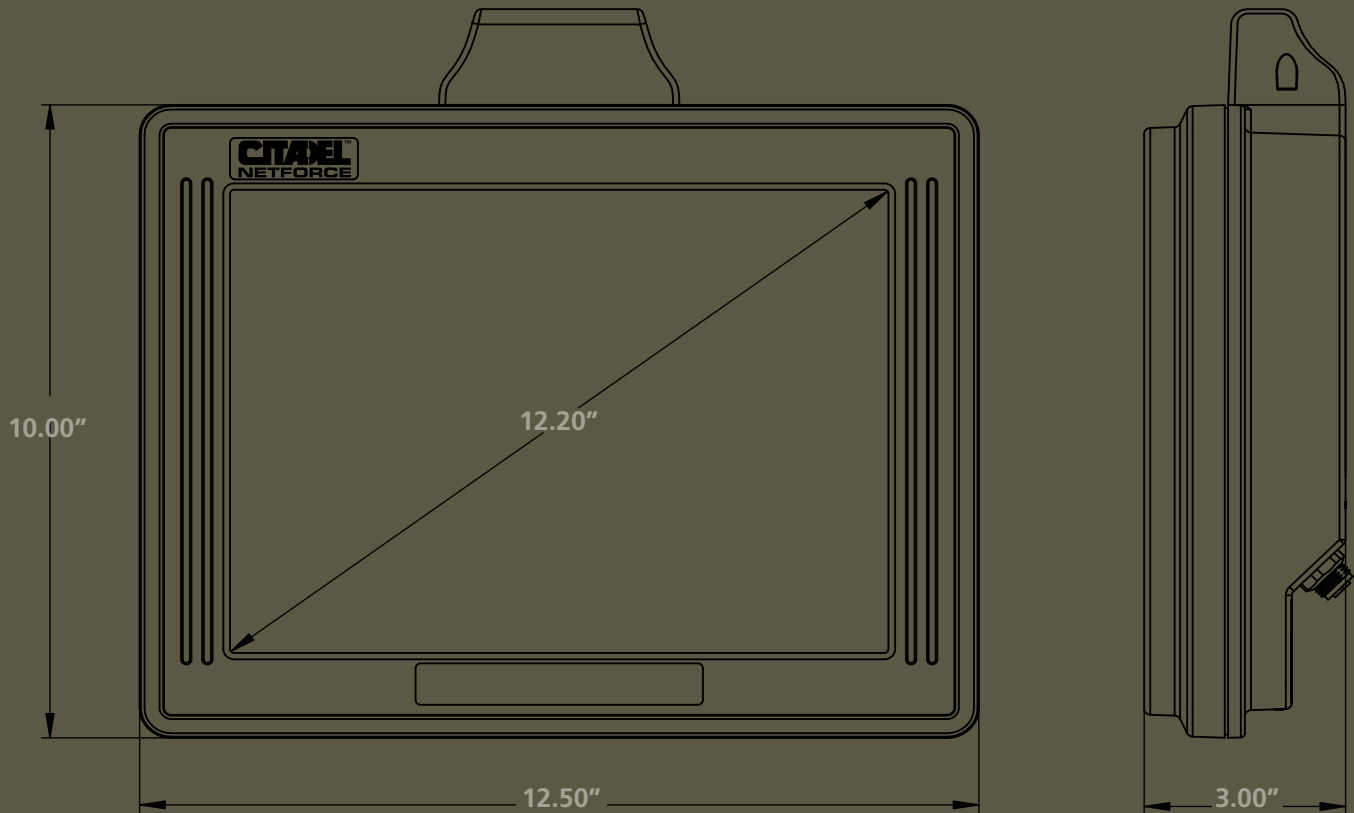
Width: 12.50" (31.75 cm)

Height: 10.00" (25.4 cm)

Depth: 3.00" (7.62 cm)

Weight: ~10 lbs. (4.54 kg) (typical)

Mechanical Dimensions



CITADEL NETFORCE

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Since 1979, Citadel Computer Corporation has focused on the design and manufacturing of rugged computers for challenging harsh-environment industrial and military applications.

Our systems combine state-of-the-art processing technology with practical real-world engineering to deliver reliable computing horsepower that withstands extremes of temperature, physical shock, vibration and exposure to the elements.

As reliable platforms performing a wide spectrum of tasks, Citadel systems are in service around globe supporting advanced processes, research and control for many of the world's leading companies.

The specifications, performance characteristics and product information contained herein are believed to be complete and accurate at the time of publication. However, Citadel Computer Corporation offers ongoing product improvements and expressly reserves the right to correct, update and/or modify product specifications without prior notice.

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