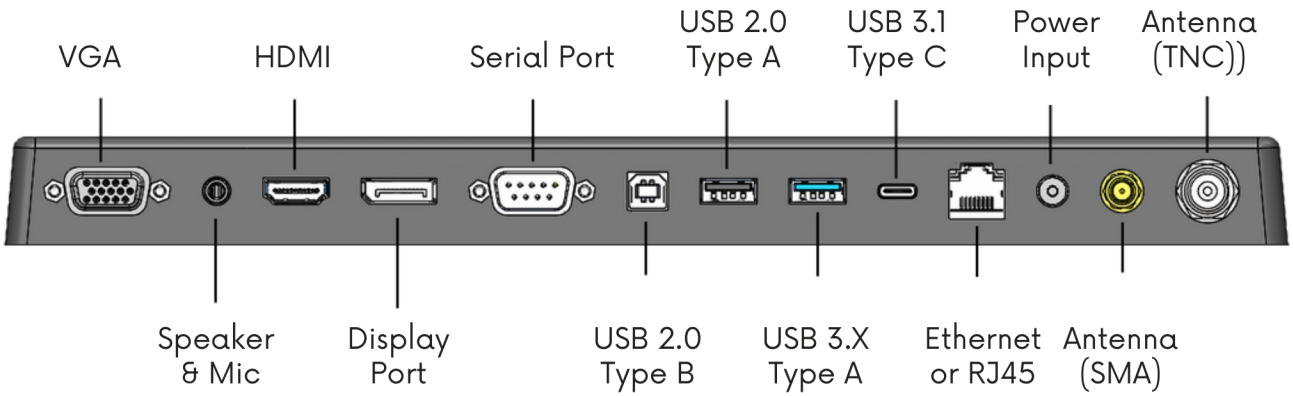
# DELL SPEEDS & FEEDS



# THE INS & OUTS OF DOCKING STATIONS




| | |
|---|---|
| VGA | Video Graphics Array(VGA) port: analog signal for video |
| Speaker & Mic | Audio ports: analog signal for audio: green-audio out; pink=microphone in |
| HDMI | High Definition Multimedia Interface: digital signal for audio & video |
| Display Port | Digital signal for audio & video |
| Serial Port | RS232 port, analog signal to connect peripherals |
| IUSB 2.0 Type B | Digital signal, transmission rate of 480 Mbps; B type rectangle connector |
| USB 2.0 Type A | Digital signal, transmission rate of 480 Mbps; A type rectangle connector |
| USB 3.X Type A | Digital signal, transmission rate of 5 Gbps; A type of rectangle connector |
| USB 3.1 Type C | Digital signal, transmission rate of 5 Gbps; C type of rectangle connector |
| Ethernet | RJ45 port: analog & digital signals, transmission rate of 100 Mbps to Gbps |
| Power Input | Barrel connector: transfer 10-12v electrical current |
| Antenna (SWA) | Coaxial RF 1/4" female connector with external threads: mobile & Wifi |
| Antenna (TNC) | Coaxial RF 7/16" female connector with external threads: mobile & Wifi |

# Havis Docking Station
# LATITUDE RUGGED NOTEBOOKS
## 5430, 7330, 5420, 5424, & 7424
## DS-DELL-420 Series



## Latitude Laptop Solution

- Low profile, lightweight and flexible design
- Port replication with integrated strain relieving
- Triple pass-thru antenna connections (Optional)
- External power supply (Optional)
- Bundles available for convenient solutions

| PART NUMBER | ETHERNET | USB 2.0 | USB 3.0 | HDMI | VGA | SERIAL | SPEAKER/ MIC | POWER INPUT | PASS-THRU ANT | ANT TYPE | EXT POWER |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DS-DELL-421 | 1 | 1 Front | 3 Rear | 1 | 1 | 2 | 1 Each | 19.5 V* | | | |
| DS-DELL-421-3 | 1 | 1 Front | 3 Rear | 1 | 1 | 2 | 1 Each | 19.5 V* | Triple | TNC | |
| DS-DELL-422 | 1 | 1 Front | 3 Rear | 1 | 1 | 2 | 1 Each | 19.5 V | | | LPS-137 |
| DS-DELL-422-3 | 1 | 1 Front | 3 Rear | 1 | 1 | 2 | 1 Each | 19.5 V | Triple | TNC | LPS-137 |
| DS-DELL-423 | | | | | | | | | | | |
| DS-DELL-423-3 | | | | | | | | | Triple | TNC | |
| DS-DELL-425 | 1 | 1 Front | 3 Rear | | | | 1 Each | 19.5 V* | | | |
| DS-DELL-425-3 | 1 | 1 Front | 3 Rear | | | | 1 Each | 19.5 V* | Triple | TNC | |
| DS-DELL-426 | 1 | 1 Front | 3 Rear | | | | 1 Each | 19.5 V | | | LPS-137 |
| DS-DELL-426-3 | 1 | 1 Front | 3 Rear | | | | 1 Each | 19.5 V | Triple | TNC | LPS-137 |

** Requires an external Dell authorized DC power supply*

### SPECIFICATIONS

Height: 10.33-in (26.23 cm)
Width: 12.39-in (31.48 cm)
Depth: 2.73-in (6.93 cm)
Weight: 4.75lbs (2.15 kg)
Mounting: Bracket fits most motion devices

### CERTIFICATIONS & TESTING

CE Certified; RoHS Compliant
Vibration Testing: MIL-STD 810H 514.8
Impact Test: SAE J1455 30mph Crash Testing
Cycle Test: Latch Handle & Docking Connectors Mechanism 30,000 cycles
Environmental Testing: Hot/Cold operational (-20C to 60C) & storage (-40C to 85C)

# Havis Docking Station
# LATITUDE RUGGED 12” TABLETS
## 7212, 7220
## DS-DELL-600 Series




## Latitude Tablet Solution

- Low profile, lightweight and flexible design
- Port replication with integrated strain relieving
- PC-ABS & Steel material construction
- Dual Pass-Thru Antenna Connections (Optional)
- External Power Supply (Optional)
- Bundles available for convenient solutions

| PART NUMBER | ETHERNET | USB 2.0 | USB 3.0 | HDMI | VGA | SERIAL | POWERED SERIAL | DISPLAY PORT | SPEAKER/ MIC | POWER INPUT | PASS-THRU ANT | ANT TYPE | EXT POWER | INT POWER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DS-DELL-601 | 1 | 1 Front | 2 Rear | | 1 | 2 | | 1 | 1 Each | 19.5 V* | | | | |
| DS-DELL-601-2 | 1 | 1 Front | 2 Rear | | 1 | 2 | | 1 | 1 Each | 19.5 V* | Dual | TNC | | |
| DS-DELL-602 | 1 | 1 Front | 2 Rear | | 1 | 2 | | 1 | 1 Each | 19.5 V | | | LPS-138 | |
| DS-DELL-602-2 | 1 | 1 Front | 2 Rear | | 1 | 2 | | 1 | 1 Each | 19.5 V | Dual | TNC | LPS-138 | |
| DS-DELL-603 | | | | | | | | | | | | | | |
| DS-DELL-603-2 | | | | | | | | | | | Dual | TNC | | |
| DS-DELL-604 | 1 | 1 Front | 2 Rear | | 1 | 2 | | 1 | 1 Each | 10-17 V | | | | Yes |
| DS-DELL-607 | 1 | 1 Front | 2 Rear | | | 2 | | | 1 Each | 19.5 V* | | | | |
| DS-DELL-607-2 | 1 | 1 Front | 2 Rear | | | 2 | | | 1 Each | 19.5 V* | Dual | TNC | | |
| DS-DELL-608 | 1 | 1 Front | 2 Rear | | | 2 | | | 1 Each | 19.5 V | | | LPS-138 | |
| DS-DELL-608-2 | 1 | 1 Front | 2 Rear | | | 2 | | | 1 Each | 19.5 V | Dual | TNC | LPS-138 | |

** Requires an external Dell authorized DC power supply*

### SPECIFICATIONS

Height: 11.5-in (29.2 cm)
Width: 11.3-in (28.7 cm)
Depth: 3.5-in (8.9 cm)
Weight: 4.9 lbs (2.2 kg)
Mounting: Bracket fits VESA 75 & most motion devices

### CERTIFICATIONS & TESTING

CE Certified; RoHS Compliant
Vibration Testing: MIL-STD 810G 514.8
Impact Test: Crash Simulation per SAE J1455
Cycle Test: Latch Tested 30,000 cycles
Environmental Testing: Hot/Cold Operation & Storage

# Havis Docking Station
# LATITUDE EXTREME RUGGED 12” TABLETS
# 7230
# DS-DELL-900 Series



## Latitude Extreme Tablet Solution

- Low profile, lightweight and flexible design
- Advanced or Standard port replication (Optional)
- Quad Pass-Thru Antenna Connections (Optional)
- Options for internal or external power supplies
- Compatible with Dell 7230 tablet accessories including hard & soft handles, magnetic mount, rotating hand strap & shoulder strap

| PART NUMBER | ETHERNET | USB -C | USB 3.0 | HDMI | POWERED SERIAL | POWER INPUT | PASS-THRU ANT | ANT TYPE | EXT POWER | INT POWER |
|---|---|---|---|---|---|---|---|---|---|---|
| DS-DELL-901 | 1 | 1 Rear | 2 Rear 1 Side | | 1 @ 5V | 9-36V | | | | NON-ISO |
| DS-DELL-901-4 | 1 | 1 Rear | 2 Rear 1 Side | | 1 @ 5V | 9-36V | Quad | SMA | | NON-ISO |
| DS-DELL-902 | 1 | 1 Rear | 2 Rear 1 Side | 1 | 1 @ 5V | 9-36V | | | | NON-ISO |
| DS-DELL-902-4 | 1 | 1 Rear | 2 Rear 1 Side | 1 | 1 @ 5V | 9-36V | Quad | SMA | | NON-ISO |
| DS-DELL-903 | | | | | | | | | | |
| DS-DELL-903-4 | | | | | | | Quad | SMA | | |
| DS-DELL-904 | 1 | 1 Rear | 2 Rear 1 Side | | 1 @ 5V | 19.5V* | | | | |
| DS-DELL-904-4 | 1 | 1 Rear | 2 Rear 1 Side | | 1 @ 5V | 19.5V* | Quad | SMA | | |
| DS-DELL-907 | 1 | 1 Rear | 2 Rear 1 Side | 1 | 1 @ 5V | 19.5V* | | | | |
| DS-DELL-907-4 | 1 | 1 Rear | 2 Rear 1 Side | 1 | 1 @ 5V | 19.5V* | Quad | SMA | | |

** Requires an external Havis-approved DC power supply*

## SPECIFICATIONS

Height: 10.2-in (25.9 cm)
Width: 10-in (25.4 cm)
Depth: 3.5-in (8.9 cm)
Weight: 2.75 lbs (1.25 kg)

## CERTIFICATIONS & TESTING

CE Certified; RoHS Compliant
Vibration Testing: MIL-STD 810H 514.8
Impact Test: Crash Simulation per SAE J1455
Cycle Test: Latch Tested 30,000 cycles
Environmental Testing: Hot/Cold Operation & Storage

# Havis Docking Station
# LATITUDE EXTREME RUGGED 12” TABLETS
# 7230
# PKG-DELL-1000 Series



## Latitude Extreme Tablet Solution

- Two-piece design provides IP65 rating & device mobility
- One-handed docking & undocking
- Port replication for seamless integration of multiple peripherals
- Internal, non-isolated (9-36VDC) or external, isolated power supply
- LED power indicator

| PART NUMBER | TABLET ADAPTER | DOCKING STATION | ETHERNET | USB 3.0 | POWERED SERIAL | POWER INPUT | EXT POWER | INT POWER |
|---|---|---|---|---|---|---|---|---|
| PKG-DELL-1001-1232 | TA-101 | DS-TAB-301 | 1 | 3 | 1 @ 5V | 12-32 V | LPS-186 | |
| PKG-DELL-1001-2060 | TA-101 | DS-TAB-301 | 1 | 3 | 1 @ 5V | 20-60 V | LPS-187 | |
| PKG-DELL-1002 | TA-101 | DS-TAB-302 | 1 | 3 | 1 @ 5V | 9-36 V | | YES |

## SPECIFICATIONS

Height: 9.64-in (24.47 cm)
Width: 9.35-in (23.75 cm)
Depth: 3.20-in (8.13 cm)
Weight: 2.82 lbs (1.28 kg)

## CERTIFICATIONS & TESTING

CE Certified; RoHS Compliant
Vibration Testing: MIL-STD 810H 514.8
Impact Test: Crash Simulation per SAE J1455
Cycle Test: Latch Tested 30,000 cycles
Environmental Testing: Hot/Cold Operation & Storage

# Havis Docking Station
# LATITUDE EXTREME RUGGED 10” TABLETS
# 7030
# DS-DELL-1100 Series



## Latitude Extreme Tablet Solution

- Compact design with one-handed docking & undocking
- Advanced or basic port replication (optional)
- Non-isolated internal or external power supply (optional)
- LED power indicator

| PART NUMBER | ETHERNET | USB -C | USB 3.0 | HDMI | POWERED SERIAL | POWER INPUT | PASS-THRU ANT | ANT TYPE | EXT POWER | INT POWER |
|---|---|---|---|---|---|---|---|---|---|---|
| DS-DELL-1101 | 1 | 1 Rear | 2 Rear 1 Side | | 1 @ 5V | 9-36V | | | | NON-ISO |
| DS-DELL-1102 | 1 | 1 Rear | 2 Rear 1 Side | 1 | 1 @ 5V | 9-36V | | | | NON-ISO |
| DS-DELL-1103 | | | | | | | | | | |
| DS-DELL-1104 | 1 | 1 Rear | 2 Rear 1 Side | | 1 @ 5V | 19.5V* | | | | |
| DS-DELL-1107 | 1 | 1 Rear | 2 Rear 1 Side | 1 | 1 @ 5V | 19.5V* | | | | |

** Requires an external Havis-approved DC power supply*

## SPECIFICATIONS

Height: 9.14-in (23.22 cm)
Width: 9.5-in (24.13 cm)
Depth: 3.45-in (8.7 cm)
Weight: 2.26 lbs (1.03 kg)

## CERTIFICATIONS & TESTING

CE Certified; RoHS Compliant
Vibration Testing: MIL-STD 810H 514.8
Impact Test: Crash Simulation per SAE J1455
Cycle Test: Latch Tested 30,000 cycles
Environmental Testing: Hot/Cold Operation & Storage

# Havis Docking Station
# LATITUDE EXTREME RUGGED 10” TABLETS
# 7030
# PKG-DELL-1200 Series



## Latitude Extreme Tablet Solution

- Two-piece design provides IP65 rating & device mobility
- One-handed docking & undocking
- Port replication for seamless integration of multiple peripherals
- Internal, non-isolated (9-36VDC) or external, isolated power supply
- LED power indicator

| PART NUMBER | TABLET ADAPTER | DOCKING STATION | ETHERNET | USB 3.0 | POWERED SERIAL | POWER INPUT | EXT POWER | INT POWER |
|---|---|---|---|---|---|---|---|---|
| PKG-DELL-1201-1232 | TA-102 | DS-TAB-301 | 1 | 3 | 1 @ 5V | 12-32 V | LPS-186 | |
| PKG-DELL-1201-2060 | TA-102 | DS-TAB-301 | 1 | 3 | 1 @ 5V | 2-60 V | LPS-187 | |
| PKG-DELL-1202 | TA-102 | DS-TAB-302 | 1 | 3 | 1 @ 5V | 9-36 V | | YES |

## SPECIFICATIONS

Height: 9.64-in (24.47 cm)
Width: 9.35-in (23.75 cm)
Depth: 3.20-in (8.13 cm)
Weight: 2.77 lbs (1.26 kg)

## CERTIFICATIONS & TESTING

CE Certified; RoHS Compliant
Vibration Testing: MIL-STD 810H 514.8
Impact Test: Crash Simulation per SAE J1455
Cycle Test: Latch Tested 30,000 cycles
Environmental Testing: Hot/Cold Operation & Storage

# WHICH I/O DO I NEED FOR MY DOCKING STATIONS?

| Port | Connector | Type | Audio | Video | Periph | Network | Camera | Power | Cell | GPS | WiFi |
|---|---|---|---|---|---|---|---|---|---|---|---|
| VGA | VGA | A/V | | X | | | | | | | |
| Speaker & Mic | 3.5 mm | A/V | X | | | | | | | | |
| HDMI | HDMI | A/V | X | X | | | | | | | |
| Display Port | DisplayPort | A/V | X | X | | | | | | | |
| Serial | DB9 | Data | | | X | | | | | | |
| USB 2.0 | Type B | Data | | | X | | | | | | |
| USB 2.0 | Type A | Data | | | X | | | | | | |
| USB 3.X | Type A | Data | | | X | | | | | | |
| USB 3.1 | Type C | Data/Power | | | X | | | X | | | |
| Ethernet | RJ45 | Network | | | | X | X | | | | |
| Power | Varies | Power | | | | | | X | | | |
| Antenna SMA | SMA | Signal | | | | | | | X | X | X |
| Antenna TNC | TNC | Signal | | | | | | | X | X | X |

## WHAT IS PASS THROUGH ANTENNA? WHICH ONE DO I NEED?

"Pass through antenna" offers connectivity through the docking station instead of external devices. Pass through antennas are used to connect devices via cellular data, WiFi, SMC connector for radio, or GPS.

## WHAT IS THE DIFFERENCE BETWEEN USB 2.0, 3.0 AND 3.1? WHAT IS CONNECTOR TYPE?

USB 3.1 is capable of 10Gbps, 3USB 3.0 5Gbps and USB 2.0 480 Mbps. The connector type refers to the shape. Connector A is rectangular, B type is square and C type is micro with bi-directional power.

## WHAT IS THE DIFFERENCE BETWEEN SERIAL AND POWERED SERIAL PORTS?

Serial ports use a 9 pin connector to connect to peripherals like Bar Code Readers where data transfer is low. Powered serial ports assign 1 of the 9 pins to power the peripheral device.

## WHAT IS THE DIFFERENCE BETWEEN VGA AND HDMI?

VGA connection offers display but requires a separate audio port for a full audio/video experience. HDMI integrates audio with a high definition video signal, thus fewer connections.

## DO I NEED ETHERNET IN A MOBILE APPLICATION? IS ETHERNET STILL A VIABLE I/O?

Ethernet ports enable in-vehicle networking with other computers and external vehicle networking when paired with a mobile modem. Peripherals like video camera systems use Ethernet to transmit data.

## WHAT IS THE DIFFERENCE BETWEEN A DOCKING STATION AND A CRADLE?

Docking stations offer port replication for a majority of the input/output connections on the device. A cradle does not offer electronics for connectivity, nor port replication.

## WHAT IS THE DIFFERENCE BETWEEN BASIC AND ADVANCED PORT REPLICATION OPTIONS?

"Advanced" port replication will offer the fullest set of input/output for a given platform. "Basic" versions offer a reduced set for less demanding applications.

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JANUARY 2023

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