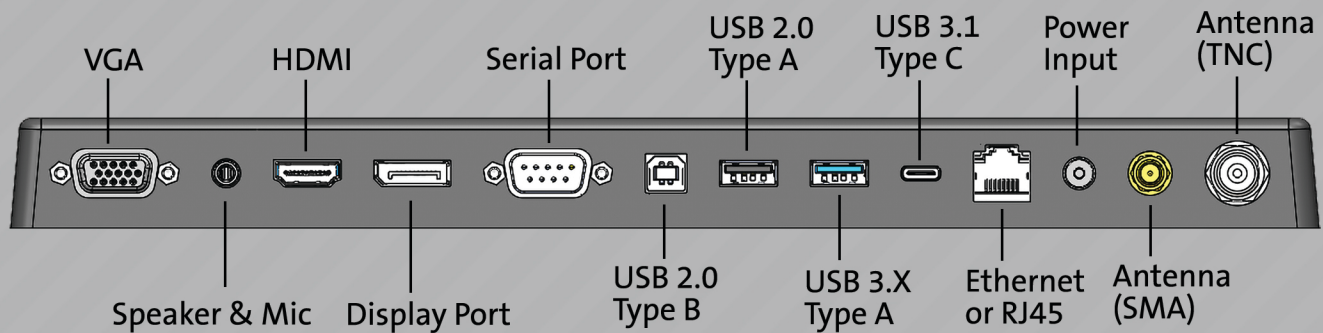


# PANASONIC SPEEDS & FEEDS





# THE INS AND 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                               |
| USB 2.0 Type B | Digital signal, transmission rate of 480 Mbps; B type square 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 rectangle connector        |
| USB 3.1 Type C | Digital signal, transmission rate of 10 Gbps; C type micro rectangle connector |
| Ethernet       | RJ45 port: analog & digital signals, transmission rate of 100Mbps to 10 Gbps   |
| Power Input    | Barrel connector: transfer 10-12v electrical current                           |
| Antenna (SMA)  | 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 TOUGHBOOK 55 DS-PAN-430

## Panasonic CONNECT



### TOUGHBOOK Laptop Solution

- Low profile, lightweight and flexible design
- Port replication with integrated strain relieving
- Retractable connector cover protects pins
- Backwards compatible for existing fleets
- 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-PAN-431   | 1        |         | 2 Rear  | 1    | 1   | 1      |                |              |             | 15.6 V*     |               |          |           |           |
| DS-PAN-431-2 | 1        |         | 2 Rear  | 1    | 1   | 1      |                |              |             | 15.6 V*     | Dual          | TNC      |           |           |
| DS-PAN-432   | 1        |         | 2 Rear  | 1    | 1   | 1      |                |              |             | 15.6 V      |               |          | LPS-112   |           |
| DS-PAN-432-2 | 1        |         | 2 Rear  | 1    | 1   | 1      |                |              |             | 15.6 V      | Dual          | TNC      | LPS-112   |           |
| DS-PAN-433   |          |         |         |      |     |        |                |              |             |             |               |          |           |           |
| DS-PAN-434   | 1        |         | 2 Rear  |      |     | 1      |                |              |             | 15.6 V*     |               |          |           |           |
| DS-PAN-434-2 | 1        |         | 2 Rear  |      |     | 1      |                |              |             | 15.6 V*     | Dual          | TNC      |           |           |
| DS-PAN-435   | 1        |         | 2 Rear  |      |     | 1      |                |              |             | 15.6 V      |               |          | LPS-112   |           |
| DS-PAN-435-2 | 1        |         | 2 Rear  |      |     | 1      |                |              |             | 15.6 V      | Dual          | TNC      | LPS-112   |           |
| DS-PAN-436   |          |         |         |      |     |        |                |              |             |             |               |          | LPS-112   |           |

\* Requires an external Panasonic authorized DC power supply

#### SPECIFICATIONS

Height: 3.0-in (7.6 cm)  
 Width: 14.1-in (35.8 cm)  
 Depth: 13.7-in (34.8 cm)  
 Weight: 5.4 lbs (2.5 kg)  
 Mounting: Bracket fits most motion devices

#### CERTIFICATIONS & TESTING

TOUGHBOOK, CE, C-Tick Certified; RoHS Compliant  
 Vibration Testing: MIL-STD 810G 514.5  
 Impact Test: Crash Simulation per SAE J1455  
 Cycle Test: Latch Tested 30,000 cycles  
 Environmental Testing: Hot/Cold Operation & Storage



# Havis Docking Station TOUGHBOOK G2 DS-PAN-720

Panasonic CONNECT



## TOUGHBOOK Tablet Solution

- Low profile, lightweight and flexible design
- Port replication with integrated strain relieving
- 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-PAN-721   | 1        |         | 2 Rear  | 1    | 1   | 1      |                |              |             | 16 V*       |               |          |           |           |
| DS-PAN-721-2 | 1        |         | 2 rear  | 1    | 1   | 1      |                |              |             | 16 V*       | Dual          | TNC      |           |           |
| DS-PAN-722   | 1        |         | 2 Rear  | 1    | 1   | 1      |                |              |             | 16 V        |               |          | LPS-114   |           |
| DS-PAN-722-2 | 1        |         | 2 Rear  | 1    | 1   | 1      |                |              |             | 16 V        | Dual          | TNC      | LPS-114   |           |
| DS-PAN-723   |          |         |         |      |     |        |                |              |             |             |               |          |           |           |
| DS-PAN-724   | 1        |         | 2 Rear  |      |     | 1      |                |              |             | 16 V*       |               |          |           |           |
| DS-PAN-724-2 | 1        |         | 2 Rear  |      |     | 1      |                |              |             | 16 V*       | Dual          | TNC      |           |           |
| DS-PAN-725   | 1        |         | 2 Rear  |      |     | 1      |                |              |             | 16 V        |               |          | LPS-114   |           |
| DS-PAN-725-2 | 1        |         | 2 Rear  |      |     | 1      |                |              |             | 16 V        | Dual          | TNC      | LPS-114   |           |
| DS-PAN-726   |          |         |         |      |     |        |                |              |             |             |               |          | LPS-114   |           |

\* Requires an external Panasonic authorized DC power supply

### SPECIFICATIONS

Height: 10.0-in (25.5 cm)  
Width: 11.4-in (28.9 cm)  
Depth: 4.4-in (11.1 cm)  
Weight: 2.6 lbs (1.2 kg)  
Mounting: VESA 75

### CERTIFICATIONS & TESTING

TOUGHBOOK, CE, C-Tick, E-Mark Certified; RoHS Compliant; UL Listed  
Vibration Testing: MIL-STD 810G 514.5  
Impact Test: Crash Simulation per SAE J1455  
Cycle Test: Latch Tested 30,000 cycles  
Environmental Testing: Hot/Cold Operation & Storage



# Havis Docking Station TOUGHBOOK G2 DS-PAN-1010

## Panasonic CONNECT



### TOUGHBOOK Laptop Solution

- Low profile, lightweight and flexible design
- Port replication with integrated strain relieving
- Retractable connector cover protects pins
- 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-PAN-1011   | 1        |         | 2 Rear  | 1    | 1   | 1      |                |              |             | 16 V*       |               |          |           |           |
| DS-PAN-1011-2 | 1        |         | 2 rear  | 1    | 1   | 1      |                |              |             | 16 V*       | Dual          | TNC      |           |           |
| DS-PAN-1012   | 1        |         | 2 Rear  | 1    | 1   | 1      |                |              |             | 16 V        |               |          | LPS-102   |           |
| DS-PAN-1012-2 | 1        |         | 2 Rear  | 1    | 1   | 1      |                |              |             | 16 V        | Dual          | TNC      | LPS-102   |           |
| DS-PAN-1013   |          |         |         |      |     |        |                |              |             |             |               |          |           |           |
| DS-PAN-1014   | 1        |         | 2 Rear  |      |     | 1      |                |              |             | 16 V*       |               |          |           |           |
| DS-PAN-1014-2 | 1        |         | 2 Rear  |      |     | 1      |                |              |             | 16 V*       | Dual          | TNC      |           |           |
| DS-PAN-1015   | 1        |         | 2 Rear  |      |     | 1      |                |              |             | 16 V        |               |          | LPS-102   |           |
| DS-PAN-1015-2 | 1        |         | 2 Rear  |      |     | 1      |                |              |             | 16 V        | Dual          | TNC      | LPS-102   |           |
| DS-PAN-1016   |          |         |         |      |     |        |                |              |             |             |               |          | LPS-102   |           |

\* Requires an external Panasonic authorized DC power supply

#### SPECIFICATIONS

Height: 2.5-in (6.3 cm)  
 Width: 11.1-in (28.1 cm)  
 Depth: 9.6-in (24.4 cm)  
 Weight: 4.3 lbs (1.9 kg)  
 Mounting: Bracket fits most motion devices

#### CERTIFICATIONS & TESTING

TOUGHBOOK, CE, C-Tick Certified; RoHS Compliant; UL Listed  
 Vibration Testing: MIL-STD 810G 514.5  
 Impact Test: Crash Simulation per SAE J1455  
 Cycle Test: Latch Tested 30,000 cycles  
 Environmental Testing: Hot/Cold Operation & Storage



## TOUGHBOOK Laptop Solution

- Low profile, lightweight and flexible design
- Port replication with integrated strain relieving
- Retractable connector cover protects pins
- 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-PAN-1111   | 2        | 2 Rear<br>2 Front | 2 Rear  | 1    | 1   | 1      |                |              |             | 15.6 V*     |               |          |           |           |
| DS-PAN-1111-2 | 2        | 2 Rear<br>2 Front | 2 rear  | 1    | 1   | 1      |                |              |             | 15.6 V*     | Dual          | TNC      |           |           |
| DS-PAN-1112   | 2        | 2 Rear<br>2 Front | 2 Rear  | 1    | 1   | 1      |                |              |             | 15.6 V      |               |          | LPS-103   |           |
| DS-PAN-1112-2 | 2        | 2 Rear<br>2 Front | 2 Rear  | 1    | 1   | 1      |                |              |             | 15.6 V      | Dual          | TNC      | LPS-103   |           |
| DS-PAN-1113   |          |                   |         |      |     |        |                |              |             |             |               |          |           |           |
| DS-PAN-1114   | 2        | 2 Rear<br>2 Front | 2 Rear  |      |     | 1      |                |              |             | 15.6 V*     |               |          |           |           |
| DS-PAN-1114-2 | 2        | 2 Rear<br>2 Front | 2 Rear  |      |     | 1      |                |              |             | 15.6 V*     | Dual          | TNC      |           |           |
| DS-PAN-1115   | 2        | 2 Rear<br>2 Front | 2 Rear  |      |     | 1      |                |              |             | 15.6 V      |               |          | LPS-103   |           |
| DS-PAN-1115-2 | 2        | 2 Rear<br>2 Front | 2 Rear  |      |     | 1      |                |              |             | 15.6 V      | Dual          | TNC      | LPS-103   |           |
| DS-PAN-1116   |          |                   |         |      |     |        |                |              |             |             |               |          | LPS-103   |           |

\* Requires an external Panasonic authorized DC power supply

### SPECIFICATIONS

Height: 2.7-in (6.6 cm)  
 Width: 12.5-in (31.7 cm)  
 Depth: 11.7-in (29.8 cm)  
 Weight: 5.4 lbs (2.4 kg)  
 Mounting: Bracket fits most motion devices

### CERTIFICATIONS & TESTING

TOUGHBOOK, CE, C-Tick, E-Mark Certified; RoHS Compliant; UL Listed  
 Vibration Testing: MIL-STD 810G 514.5  
 Impact Test: Crash Simulation per SAE J1455  
 Cycle Test: Latch Tested 30,000 cycles  
 Environmental Testing: Hot/Cold Operation & Storage

# Havis Docking Station TOUGHBOOK 33

DS-PAN-1200

Panasonic CONNECT



## TOUGHBOOK Tablet Solution

- Low profile, lightweight and flexible design
- Port replication with integrated strain relieving
- 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-PAN-1201   | 2        | 2 Rear<br>2 Front | 2 Rear  |      |     | 1      |                |              |             | 15.6 V*     |               |          |           |           |
| DS-PAN-1201-2 | 2        | 2 Rear<br>2 Front | 2 rear  |      |     | 1      |                |              |             | 15.6 V*     | Dual          | TNC      |           |           |
| DS-PAN-1202   | 2        | 2 Rear<br>2 Front | 2 Rear  |      |     | 1      |                |              |             | 15.6 V      |               |          | LPS-103   |           |
| DS-PAN-1202-2 | 2        | 2 Rear<br>2 Front | 2 Rear  |      |     | 1      |                |              |             | 15.6 V      | Dual          | TNC      | LPS-103   |           |
| DS-PAN-1203   |          |                   |         |      |     |        |                |              |             |             |               |          |           |           |
| DS-PAN-1204   | 2        | 2 Rear<br>2 Front | 2 Rear  | 1    | 1   | 1      |                |              |             | 15.6 V*     |               |          |           |           |
| DS-PAN-1204-2 | 2        | 2 Rear<br>2 Front | 2 Rear  | 1    | 1   | 1      |                |              |             | 15.6 V*     | Dual          | TNC      |           |           |
| DS-PAN-1205   | 2        | 2 Rear<br>2 Front | 2 Rear  | 1    | 1   | 1      |                |              |             | 15.6 V      |               |          | LPS-103   |           |
| DS-PAN-1205-2 | 2        | 2 Rear<br>2 Front | 2 Rear  | 1    | 1   | 1      |                |              |             | 15.6 V      | Dual          | TNC      | LPS-103   |           |
| DS-PAN-1206   |          |                   |         |      |     |        |                |              |             |             |               |          | LPS-103   |           |

\* Requires an external Panasonic authorized DC power supply

### SPECIFICATIONS

Height: 11.8-in (30.0 cm)  
 Width: 12.9-in (32.7 cm)  
 Depth: 3.5-in (8.9 cm)  
 Weight: 3.1 lbs (1.4 kg)  
 Mounting: VESA 75 & RAM 2.25" Ball

### CERTIFICATIONS & TESTING

TOUGHBOOK, CE, C-Tick, E-Mark Certified; RoHS Compliant; UL Listed  
 Vibration Testing: MIL-STD 810G 514.5  
 Impact Test: Crash Simulation per SAE J1455  
 Cycle Test: Latch Tested 30,000 cycles  
 Environmental Testing: Hot/Cold Operation & Storage





## TOUGHBOOK Tablet Solution

- Low profile, lightweight & versatile design
- Port replication with integrated cable management
- Dual pass-thru antenna connections (Optional)
- External power supply (Optional)
- Bundles available for convenient solution

| 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-PAN-1301   |          | 1 Rear  |         |      |     |        |                |              |             | 5 V*        |               |          |           |           |
| DS-PAN-1301-2 |          | 1 Rear  |         |      |     |        |                |              |             | 5 V*        | Dual          | TNC      |           |           |
| DS-PAN-1302   |          | 1 Rear  |         |      |     |        |                |              |             | 5 V         |               |          | LPS-160   |           |
| DS-PAN-1302-2 |          | 1 Rear  |         |      |     |        |                |              |             | 5 V         | Dual          | TNC      | LPS-160   |           |
| DS-PAN-1303   |          |         |         |      |     |        |                |              |             |             |               |          |           |           |
| DS-PAN-1306   |          |         |         |      |     |        |                |              |             |             |               |          | LPS-160   |           |

\* Requires an external Panasonic authorized DC power supply

### SPECIFICATIONS

Height: 7.1-in (17.9 cm)  
 Width: 7.9-in (20.0 cm)  
 Depth: 2.5-in (6.2 cm)  
 Weight: 0.98 lbs (0.45 kg)  
 Mounting: VESA 75

### CERTIFICATIONS & TESTING

TOUGHBOOK, CE, C-Tick, E-Mark Certified; RoHS Compliant; UL Listed  
 Vibration Testing: MIL-STD 810G 514.5  
 Impact Test: Crash Simulation per SAE J1455  
 Cycle Test: Latch Tested 30,000 cycles  
 Environmental Testing: Hot/Cold Operation & Storage

# Havis Docking Station TOUGHBOOK A3

DS-PAN-1400

Panasonic CONNECT



## TOUGHBOOK Tablet Solution

- One-handed docking
- Compact and lightweight
- Port replication with integrated strain relieving
- 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-PAN-1401   | 1        | 2 Rear  |         |      |     |        |                |              |             | 16V*        |               |          |           |           |
| DS-PAN-1401-2 | 1        | 2 Rear  |         |      |     |        |                |              |             | 16V*        | Dual          | TNC      |           |           |
| DS-PAN-1402   | 1        | 2 Rear  |         |      |     |        |                |              |             | 16V         |               |          | LPS-102   |           |
| DS-PAN-1402-2 | 1        | 2 Rear  |         |      |     |        |                |              |             | 16V         | Dual          | TNC      | LPS-102   |           |
| DS-PAN-1403   |          |         |         |      |     |        |                |              |             |             |               |          |           |           |
| DS-PAN-1406   |          |         |         |      |     |        |                |              |             | 16V         |               |          | LPS-102   |           |

\* Requires an external Panasonic authorized DC power supply

### SPECIFICATIONS

Height: 9.77" (24.82 cm)  
 Width: 11.45" (29.08 cm)  
 Depth: 3.96" (10.06 cm)  
 Weight: 3.00 lbs (1.36 kg)  
 Mounting: VESA 75

### CERTIFICATIONS & TESTING

TOUGHBOOK, UL Safety, CE Certified; RoHS Compliant  
 Vibration Testing: MIL-STD 810H 514.5  
 Impact Test: Crash Simulation per SAE J1455  
 Cycle Test: Latch Tested 30,000 cycles  
 Environmental Testing: Hot/Cold Operation & Storage



## TOUGHBOOK Laptop Solution

- Compact and lightweight
- Port replication with integrated strain relieving
- Quad Pass-Thru Antenna Connections (Optional)
- External Power Supply (Optional)
- Bundles available for convenient solutions

| PART NUMBER   | ETHERNET | USB 2 - TYPE A | USB 3 - TYPE A | USB 2 - TYPE C | USB 3 - TYPE C | HDMI | SERIAL | POWER INPUT | PASS-THRU ANT | ANITYPE | EXT POWER |
|---------------|----------|----------------|----------------|----------------|----------------|------|--------|-------------|---------------|---------|-----------|
| DS-PAN-1501   | 2        | 2              | 1              | 1 FRONT*       | 2*             |      | 1      | 15.6 V***   |               |         |           |
| DS-PAN-1501-4 | 2        | 2              | 1              | 1 FRONT*       | 2*             |      | 1      | 15.6 V***   | QUAD          | SMA     |           |
| DS-PAN-1502   | 2        | 2              | 1              | 1 FRONT*       | 2*             |      | 1      | 15.6 V      |               |         | LPS-103   |
| DS-PAN-1502-4 | 2        | 2              | 1              | 1 FRONT*       | 2*             |      | 1      | 15.6 V      | QUAD          | SMA     | LPS-103   |
| DS-PAN-1503   |          |                |                |                |                |      |        |             |               |         |           |
| DS-PAN-1504   | 2        | 2              | 1              | 1 FRONT*       | 2**            | 1    | 1      | 15.6 V***   |               |         |           |
| DS-PAN-1504-4 | 2        | 2              | 1              | 1 FRONT*       | 2**            | 1    | 1      | 15.6 V***   | QUAD          | SMA     |           |
| DS-PAN-1505   | 2        | 2              | 1              | 1 FRONT*       | 2**            | 1    | 1      | 15.6 V      |               |         | LPS-103   |
| DS-PAN-1505-4 | 2        | 2              | 1              | 1 FRONT*       | 2**            | 1    | 1      | 15.6 V      | QUAD          | SMA     | LPS-103   |
| DS-PAN-1506   |          |                |                |                |                |      |        |             |               |         | LPS-103   |

Note: All ports are rear-facing unless otherwise noted.

\* Does not support external video

\*\* External video supported; consult Owner's Manual for additional details

\*\*\* Requires an external Panasonic authorized DC power supply

### SPECIFICATIONS

Height: 2.63" (6.7 cm)  
 Width: 14.4" (36.6 cm)  
 Depth: 12.3" (31.3 cm)  
 Weight: 6.25 lbs (2.5 kg)  
 Mounting: Bracket fits most motion devices

### CERTIFICATIONS & TESTING

TOUGHBOOK, CE, C-Tick (pending); RoHS Compliant; UL Listed  
 Vibration Testing: MIL-STD 810H 514.5  
 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    |

### 1. 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 to devices via cellular data, WiFi, SMC connector for radio, or GPS.*

### 2. What is the difference between USB 2.0, 3.0 and 3.1? What is a 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 rectangle, B type is square and C type is micro with bi-directional power.*

### 3. 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 of the 9 pins to power the peripheral device.*

### 4. 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 intergates audio with a high de,nition video signal, thus fewer connections.*

### 5. 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.*

### 6. 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.*

### 7. 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.*



## COMPLETE SOLUTIONS

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