



# VEHICLE DOCK FOR DELL LATITUDE RUGGED LAPTOP COMPUTERS

## USER GUIDE

Description	Part Number
LATITUDE RUGGED ADVANCED NPT DOCK	AS7.D900.100
LATITUDE RUGGED ADVANCED TPT DOCK	AS7.D900.103
LATITUDE RUGGED CRADLE	AS7.D900.104
LATITUDE RUGGED ADVANCED NPT REAR PORT DOCK	AS7.D901.100
LATITUDE RUGGED ADVANCED TPT REAR PORT DOCK	AS7.D901.103

Bundles with power adapters included as a kit are available and are indicated with –PS suffix added to the part number.

This dock is designed to be compatible with the following models:

Dell Latitude Rugged 5404 / 5414 / 5420 / 5424 / 5430

Dell Latitude Rugged Extreme 7204 / 7214 / 7404 / 7414 / 7424 / 7330

Refer to our “Retrofit Front Clamp Kit” user guides available on our website for compatibility and setup with various Latitude Rugged devices.



# GENERAL INSTRUCTIONS

## Safety:

- Safety is dependent on the proper installation and servicing of this docking station. It is important to read and follow all instructions before installing this product.
- Proper installation requires a good understanding of automotive electrical systems and is recommended to be performed by qualified technicians only.
- There are no adjustments or user serviceable parts within the docking station. Opening the docking station will void the product warranty
- Do not install equipment or route wires in the deployment path of any air bag, or where it may interfere with critical safety or operating controls of any vehicle.

## Power:

- The power input should be 20Vdc / 4.5 A (90W). PMT recommends using a 90W Lind Auto Adapter (PMT part#: PS005) for this dock.
- Power must only be supplied to either the docking station, or directly to the laptop (cradles only), never both.
- Power supply must comply with local jurisdictions.

## Wiring:

- PMT does not recommend relying on a cigarette socket adaptor for powering vehicle docks. We recommend hard wiring the power adapter using a good clean ground direct from the vehicle battery neg(-) post, and pos(+) supply from a fused 12Vdc location also directly from the vehicle battery. All peripherals connecting to the docking station requiring external power should get power and ground from the same location as the dock.
- Visit [www.precisionmounts.com/support/installation-user-guides.html](http://www.precisionmounts.com/support/installation-user-guides.html) for a copy of our general wiring and troubleshooting guide.

## Proper Use and Care:

- Proper care and use of this product is critical to maximize safety and to prevent damage to the docking station and laptop.
- Do not store, place, or drag any object on top of the docking station.
- Visually inspect the docking station and laptop for any defect before using the dock or docking the laptop. Do not use if damaged.
- Any modifications made to the docking station could result in adverse performance and damage to the laptop and/or docking station and will void the warranty.
- Do not attempt to dock a computer or dock with wet contacts

## Environmental:

- Storage: -51°C to 85°C
- Operating: -29°C to 63°C

## Servicing [Entretien]:

- If the dock does not work as intended, please contact PMT for troubleshooting or to schedule a service. *[Si le dock ne fonctionne pas comme prévu, contactez PMT pour le dépannage ou pour planifier un service.]*
- Servicing of the dock should be only done by authorized service center personnel. Unauthorized servicing of the dock will void its warranty. *[L'entretien du dock ne doit être effectué que par le personnel du centre de service autorisé. Un entretien non autorisé du dock annulera sa garantie.]*

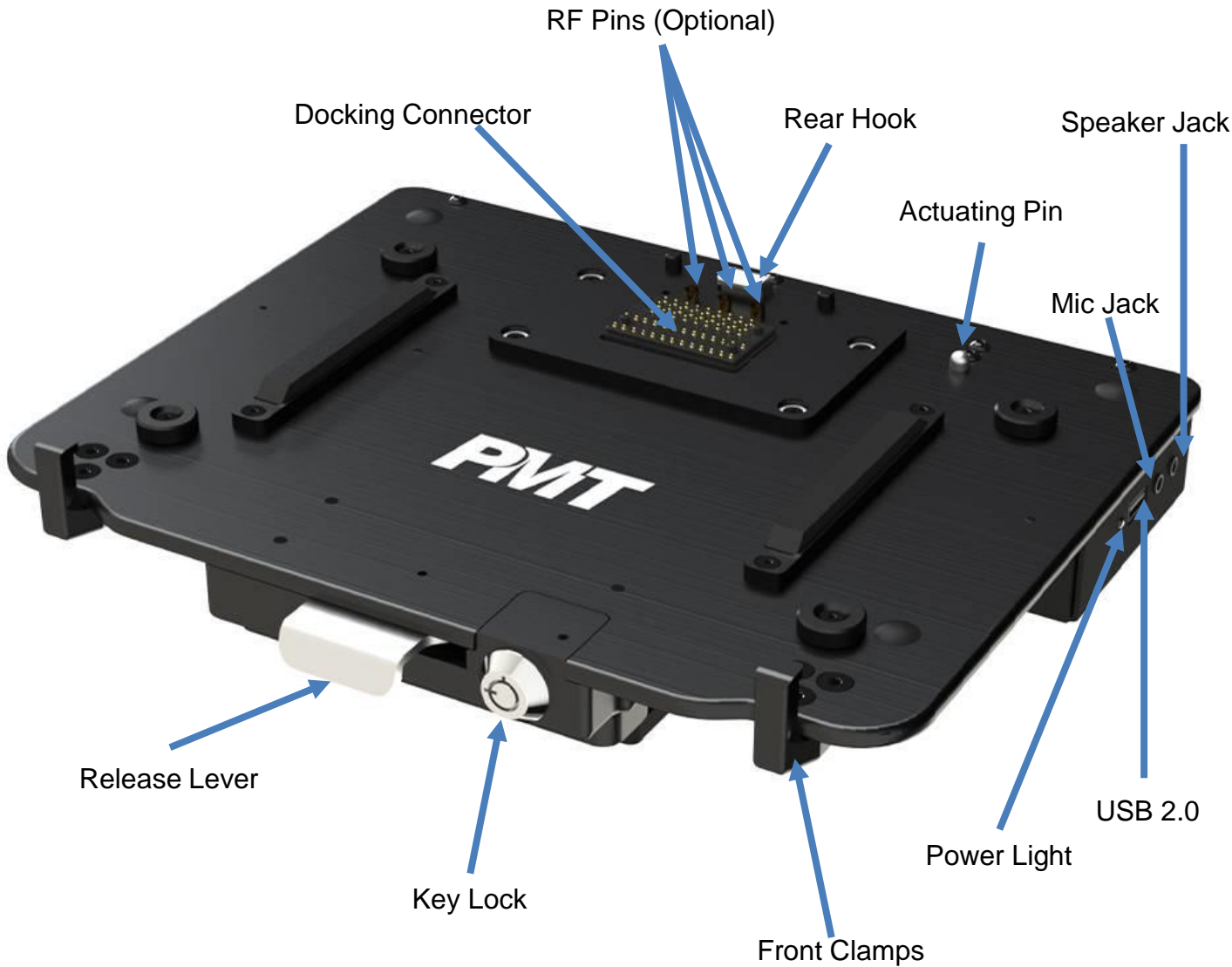
### Product Mounting Disclaimer

Precision Mounting Technologies Ltd (PMT) are not liable under any theory of contract or tort law for any loss, damage, personal injury, special, incidental or consequential damages for personal injury or other damage of any nature arising directly or indirectly as a result of the improper installation or use of its products in vehicle or any other application. In order to safely install and use PMT products full consideration of vehicle occupants, vehicle systems (i.e., the location of fuel lines, brake lines, electrical, drive train or other systems), air-bags and other safety equipment is required. PMT specifically disclaims any responsibility for the improper use or installation of its products not consistent with original vehicle manufactures' specifications and recommendations, PMT product instruction sheets, or workmanship standards as endorsed through PMT policies and EULA.



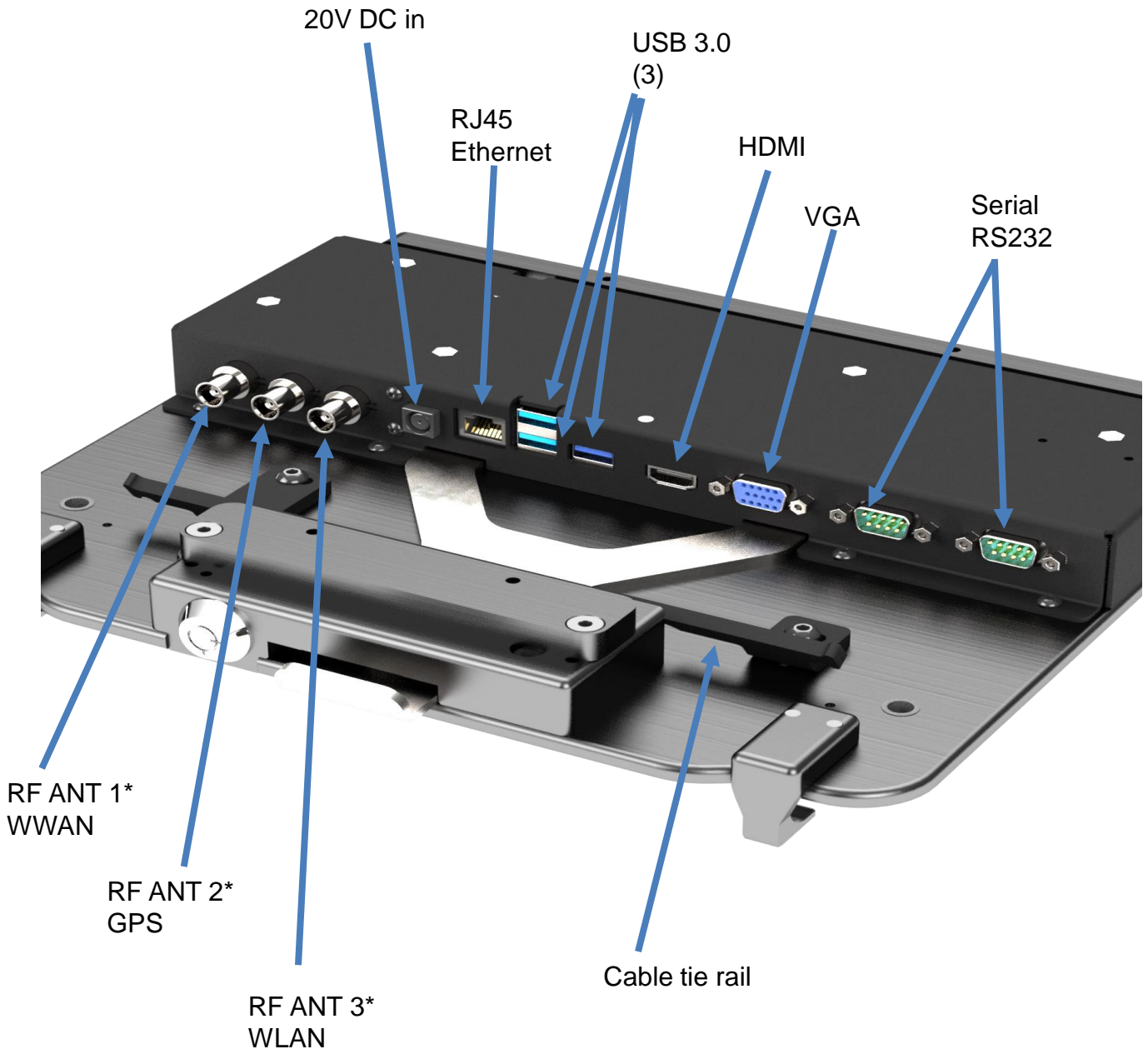
# DESCRIPTION OF PARTS

Forward facing port version shown



# DESCRIPTION OF PARTS CONT'D

Forward facing port version shown (mounting plate removed for clarity)

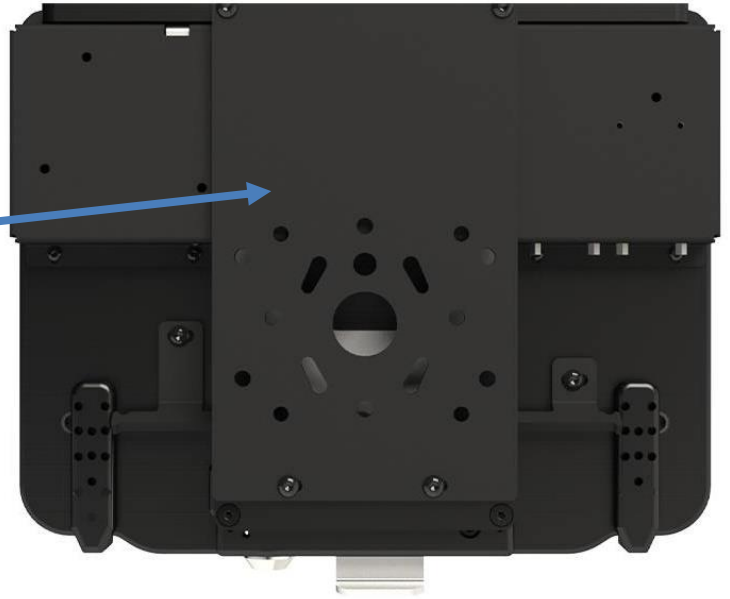


\*RF Antenna connections are optional based on docking station model. Connectors are TNC

# DESCRIPTION OF PARTS CONT'D

Forward facing port version  
Bottom view

Mounting plate.  
Note orientation.



Rear facing port version  
Bottom view

Mounting plate.  
Note orientation.

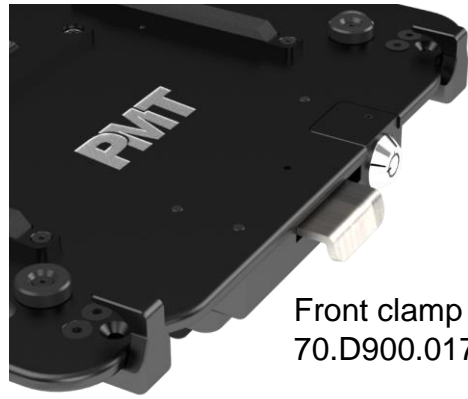
Slots for cable  
tie



# DOCKING STATION SETUP

Multiple models of Dell Rugged Laptops are compatible with this docking station. However, some models may require a "retrofit front clamp kit" available from PMT. Please refer to our website and info regarding our Retrofit Front Clamp kits for detailed information. The image to the right is how docking stations are shipped as of 5/2023 and is the correct setting for Latitude Rugged and Latitude Rugged Extreme 5430 and 7330 laptops. For other configurations use a 1/8" Allen/Hex key/wrench to remove the screws, reposition or replace the clamps as needed, then re-install the screws.

Clamp configuration for 5430, 7330



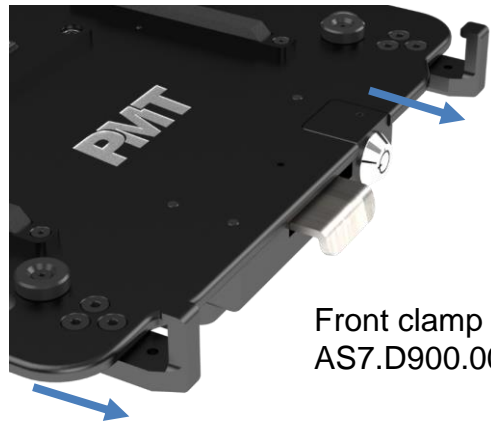
Front clamp part#  
70.D900.017

Clamp configuration for 7214:



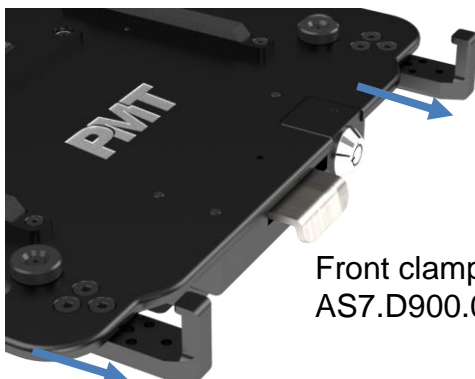
Front clamp part#  
AS7.D900.007

Clamp configuration for 5404, 5414,  
5420, 5424, 7204:



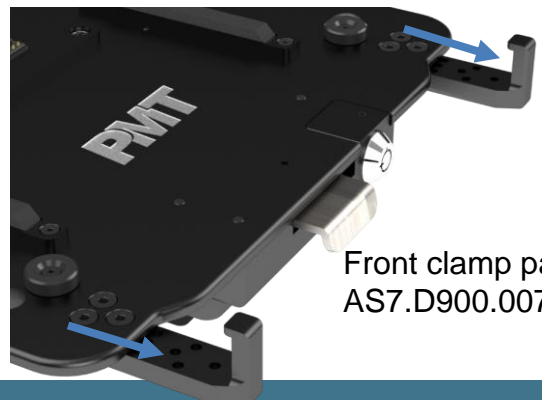
Front clamp part#  
AS7.D900.007

Clamp configuration for 7424:



Front clamp part#  
AS7.D900.007

Clamp configuration for 7404 7414:

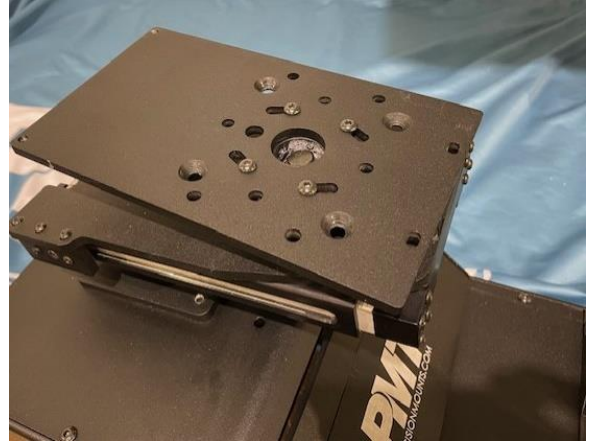


Front clamp part#  
AS7.D900.007

# INSTALLATION

## Step 1:

Using a 1/8" Allen/Hex key (wrench), remove the four #10-24 screws attaching the mounting plate to the dock and remove the plate.



## Step 2:

Install mounting plate onto mounting infrastructure using the four provided screws and hardware that best suit the installation. Be sure to orientate the plate in the correct position (holes toward user, and counter sunk holes up).

## Step 3:

Connect all required wiring to the dock while utilizing plastic tie straps and the cable tie rail to secure cables/connections. Each cable connecting to the docking station should be secured via a tie strap before exiting the docking station. Ensure to provide a sufficient "service loop" of cabling to allow for adjustment and positioning of the docking station.



## Step 4:

Attach dock to mounting plate using the four #10-24 screws removed in step 1.



Note – PMT recommends using Blue Loctite 243 (not provided) or equivalent on all hardware when using docking station in a mobile environment.

Tip: Visit our website to search for and review our "General wiring and troubleshooting guide" for further information.

# DOCKING THE LAPTOP

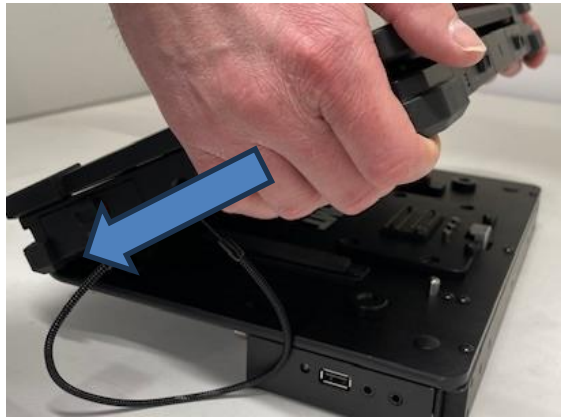
## Step 1:

Ensure lock is in the unlocked position, then press the release lever to prep the docking station for the laptop.



## Step 2:

Place laptop front edge first against the front clamps ensuring proper alignment. Ensure any loose cables or tethers do not come in between laptop and dock



## Step 3:

Lower the rear of the laptop down onto the docking station and press until it clicks and the dock latches closed. If excess force is felt, return to step 1 and do not force. Verify complete docking by lifting the laptop up. If it does not come out of the dock, successful docking is complete.



## Step 4:

For additional security and theft deterrence, insert key and rotate lock to the locked position as shown.





# UN-DOCKING THE LAPTOP

## Step 1:

If previously locked, insert key and rotate lock to the unlocked position.

## Step 2:

Press the release lever and pull the rear of the laptop up out of the dock. Be careful not to drag the laptop across the docking connector and or RF pins.



## Step 3:

Lift the laptop out of the docking station taking care not to drag the laptop across the docking connector.



Regulatory model: AS7.D900.103

## Certifications and test standards:

SAE J1455, Section 4.11.3.5

MIL-STD-810G: 2014

RoHS 3 (2015/863)

Made in Canada

