

IMPORTANT SAFETY INSTRUCTIONS



WARNING

This symbol indicates information concerning your personal safety.



CAUTION

This symbol indicates information on how to avoid damaging the unit.



IMPORTANT

This symbol indicates tips and information about FR210PB, FR210DS, FR210CS Operation.



CAUTION / WARNING

- Read all instructions before using the product.
- To reduce risk of injury, close supervision is necessary when the product is used near children.
- Use of an attachment not recommended or sold by power bank manufacture may result in a risk of fire, electric shock, or injury to persons.
- To reduce risk of damage to the electric plug and cord, pull the plug rather than the cord when disconnecting power pack.
- Do not operate the unit with a damaged cord or plug, or a damaged output cabled.
- Do not use if the unit has been damaged or modified. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- Do not disassemble FR210PB, FR210CS, FR210DS, take it to a qualified service person when a service or repair is required. Incorrect assembly may result in a risk of fire or electric shock.
- Do not exposed to water.
- This unit may become hot when recharging, handle with care.
- Do not leave in hot conditions 35C or above e.g., left sitting in hot car, left sitting in direct sunlight.
- Do not operate unit outside of specified conditions.
- This unit contains Li-ion 18650 or equivalent cells.
- Do not expose to heat or throw in fire.
- Do not attempt to modify.
- Be careful when unpackaging the unit. Do not use sharp objects when removing the packaging as this may cause scratches to the unit.

SAVE THESE INSTRUCTIONS



Contents

Product Specifications.....	3
Product Overview	
FR210PB.....	4
FR210CS.....	4
FR210DS.....	4
Setting up FR210CS.....	4
Using FR210CS.....	5
Setting up FR210DS.....	6
Using FR210DS.....	7
Using FR210PB.....	7
User Maintenance Instructions	8
Moving and Storage Instructions	8
Disposal of Product.....	8
Trouble Shooting.....	9
FR210DS Wiring Examples.....	11

Specification FR210PB

Model: FR210PB

Battery cells: Li-ion 18650

Battery Capacity: 9540mAh*(206Wh)_(± 5%)

Input (12pin): DC 20V/7.5A (max) via Charging Station (FR210CS), DC 20V/5A (max) via Docking Station (FR210DS)

Type-C output: DC 5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/5A (PD3.0 100W)

Type-A output: DC 5V/3A, 9V/2A, 12V/1.5A (QC3.0 18W)

Total output: 118W (Both ports combined)

Dimensions: 251.8mm (L) x 151.4mm (W) x 38.1mm (H)

Weight: 1.53KG

Operation Temperature: 5~35C

Packaging Content: 1 x FR210PB (Release Key included with FR210PBK variant)

Specification FR210CS

Model: FR210CS

Power Input: 20V/7.5A

Power output: 20V/7.5A

Dimensions: 326.4mm (L) x 199.3mm (W) x 92mm (H)

Weight: 1.88KG

Operation Temperature: 5~35C

Packaging content: 1 x FR210CS, 1 x AC Power Cord, 1 x Power Supply (20V/7.5A)

Specification FR210DS

Model: FR210DS

Power Input: DC Jack 20V/5A, USB C 20V/3A

Type-C output: DC 5V/3A, 9V/3A, 12V/3A, 15V/3A, 20V/5A (PD3.0 100W)

Type-A output: DC 5V/3A, 9V/2A, 12V/1.5A (QC3.0 18W)

DC OUT 1: (XT60 connector) 18-25.2V (Cell voltage) 16-18A

DC OUT 2: (XT60 connector) 12V, 18V, 20V, 24V/11A

Total output: 300W combined (350W DC OUT 1 for 1 – 2 minutes at a time)

Dimensions: 280.5mm (L) x 152.2mm (W) x 31.6mm (H)

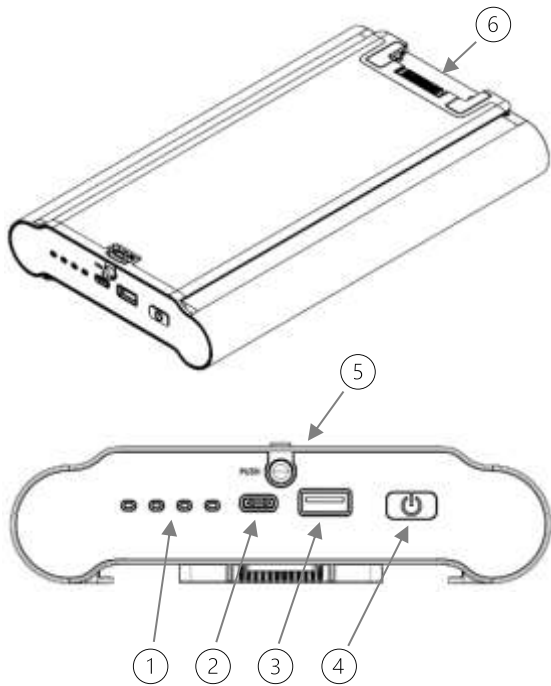
Weight: 0.92KG

Operation Temperature: 5~35C

Packaging content: 1 x FR210DS

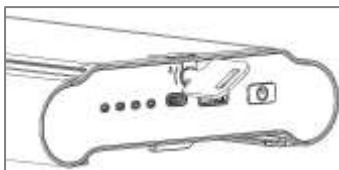


Product Overview – FR210PB



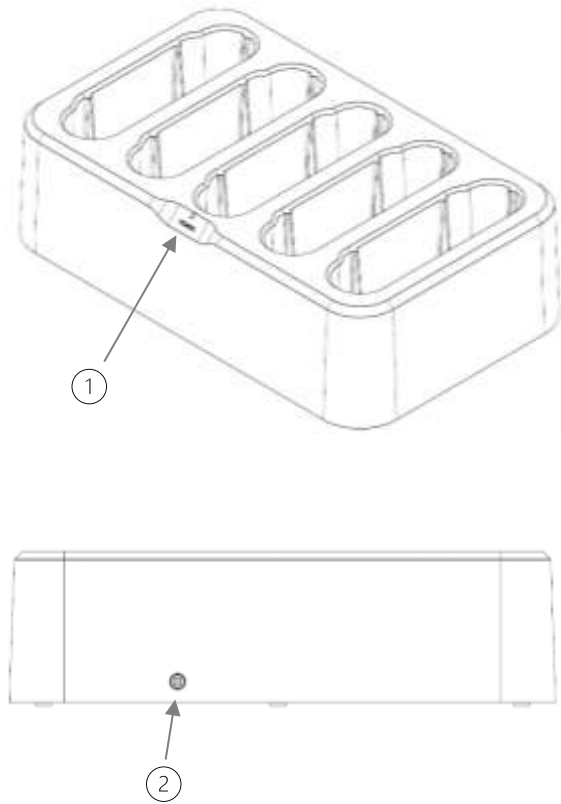
- ① LED Charge level indicator
- ② USB C Port
- ③ USB A Port
- ④ Power Button
- ⑤ Push Button Release

(Key version depicted below)



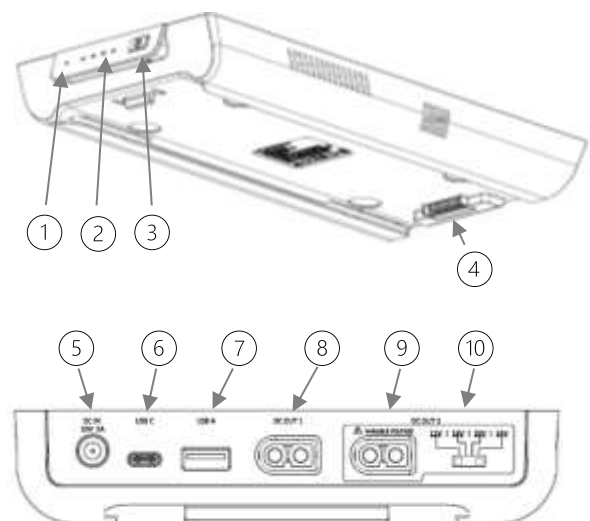
- ⑥ 12pin connector

Product Overview – FR210CS



- ① Power Indicator
- ② D.C. Jack – Power In (20V/7.5A)

Product Overview – FR210DS



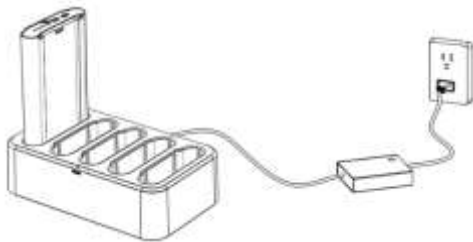
- ① Overload Indication (Red)
- ② Charge level Indication
- ③ Power Button
- ④ 12pin connector
- ⑤ DC IN 20V/5A
- ⑥ USB C Port
- ⑦ USB A Port
- ⑧ DC Out 1
- ⑨ DC Out 2
- ⑩ Voltage Selector Switch

Setting Up FR210CS



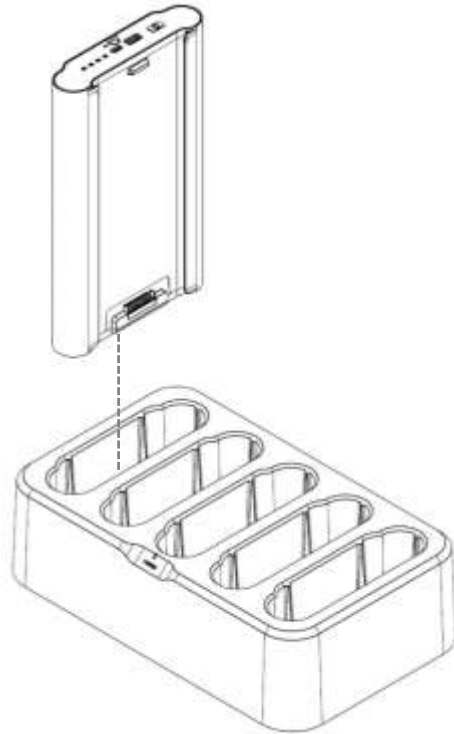
IMPORTANT

Setting up



1. Plug the AC cord into the power supply.
2. Plug the AC plug into an outlet.
3. Plug the power out lead from the power supply into the DC jack on at the back of FR2CS. Power indicator will illuminate green.

Using FR210CS



To recharge the power bank (FR210PB), place it into the dedicated charging station (FR210CS). The power bank will be recharged via the 12pin connector the end of each unit. The Charging Station can hold and charge up to five power banks (FR210PB) simultaneously.

Refer to the below table for charging times in relation to number of units charging.

5 Units	3 Units	1 Unit
9-10 Hours	6-7 hours	2-3 hours

☀ ☀ ☀ ☀	100%
🌙 ☀ ☀ ☀	76% - 99%
● 🌙 ☀ ☀	51% - 75%
● ● 🌙 ☀	26% - 50%
● ● ● 🌙	1% - 25%

🌙 ..FLASH ☀ ..ON ● ..OFF

A white LED will flash to indicate the power bank is recharging. As the unit charges the additional LED(s) will remain on until all four LEDs are on constantly.

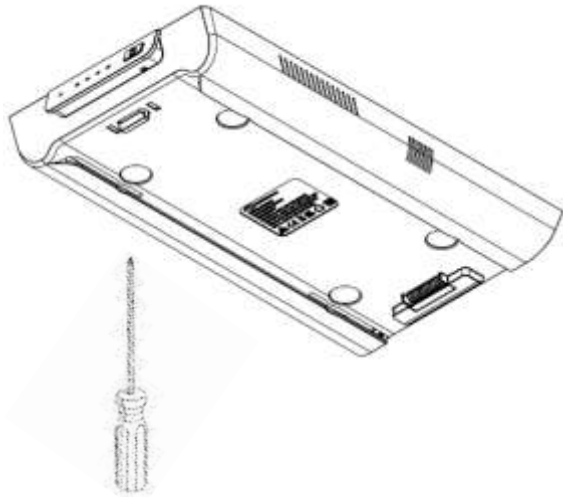


Setting Up FR210DS

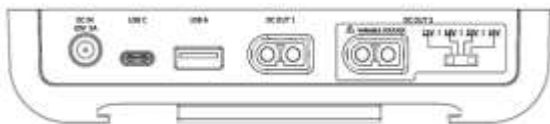


IMPORTANT

Setting up

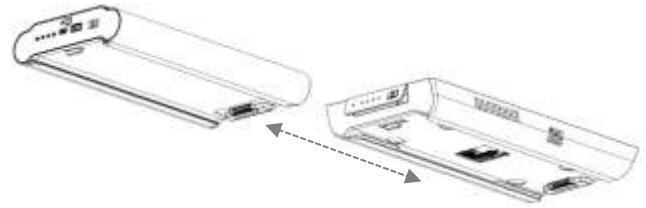


1. Position and screw the Docking Station (FR210DS) into place on the underside of the workstation using 4qty 4G screw. There are 4 screw fixing locations on the underside of the Docking Station.

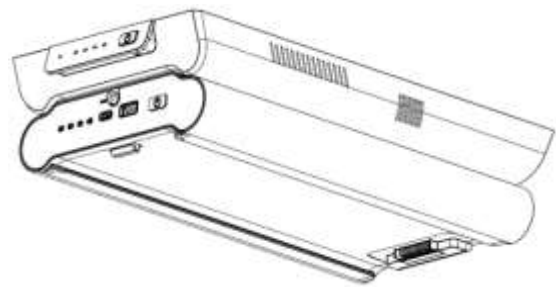


2. Connect compatible CMS products to the output ports on the rear of the unit. Note: if you are using DC OUT 2 make sure the correct voltage is selected before plugging in compatible devices.

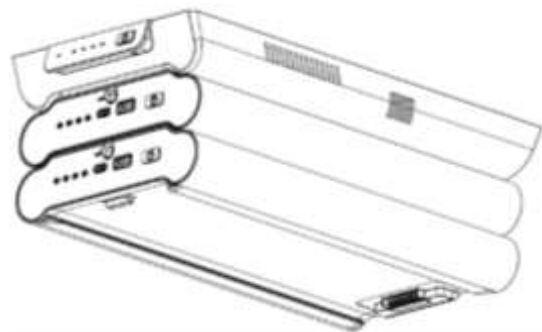
Using FR210DS



Slide the Power Bank (FR210PB) into the Docking Station (FR210DS) as shown. You will hear an audible clicking sound when locked in. The power button on the docking station may need to be pressed to power on the unit. All 4 LED's will illuminate when on to display charge level of docked power banks.



Multiple Power Banks can be stacked to increase runtime as shown below.



To disengage Power Bank(s) either press the push button release at the front of the unit you wish to disengage or use the key and turn in a clockwise direction. When released the Power Bank will spring out/forward slightly. Note some force may be required when pressing push release button in.





IMPORTANT - Maximum Outputs

The maximum available output of FR210DS with 1 Power Bank (FR210PB) docked is 150W between all output ports. Maximum output is increased to 300W with 2 or more Power Banks (FR210PB) docked. (350W for 1-2 minutes continues to operate sit to stand desk)

As FR210DS operates each LED will go out systematically until the docked power bank(s) are depleted.

☀ ☀ ☀ ☀	100% - 75%
● ☀ ☀ ☀	74% - 50%
● ● ☀ ☀	49% - 25%
● ● ● ☀	24% - 1%
● ● ● ●	1 - 0%

..FLASH
 ..ON
 ..OFF

The docking station (FR210DS) is capable of recharging the docked power bank(s) (FR210PB) via the 20V/7.5A DC IN JACK. The Recharge times will be slower compared to using the charging station (FR210CS). Note that when recharging all output ports will be disabled.



Refer to the below table for recharging times in relation to the number of docked power banks.

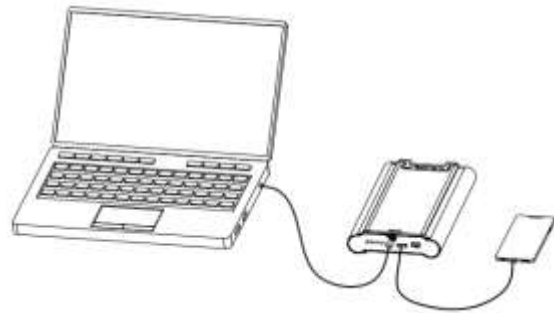
1 Unit Docked	2 Units Docked	3 Units Docked
3-4 hours	6-7 hours	8-9 hours

Using FR210PB



IMPORTANT – Unboxing

FR210PB will first need to be charged via FR210DS or FR210CS when first unpackaged. Refer 'Using FR210CS'



The power bank (FR210PB) can recharge any USB C or USB A compatible device(s). Simply plug in the device and the power bank will auto detect that a device has been plugged in and power on. Four white LED's will illuminate to indicate the power banks charge level.

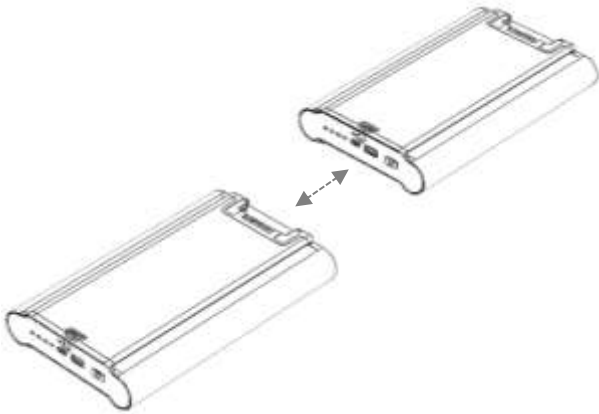
The power button can also be pressed to turn on the power bank and display charge level. To turn off the power bank long press the power button for 10 seconds, the 4 LED's will cycle through 3 times before turning off.

As FR210PB charges your device each LED will go out systematically until the power bank is depleted.

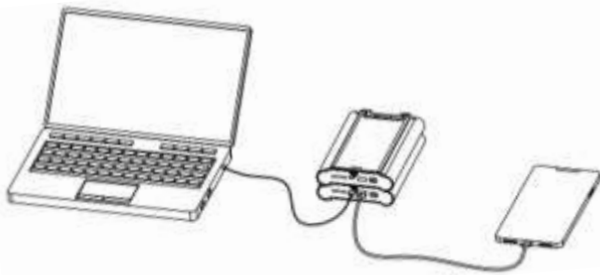
☀ ☀ ☀ ☀	100% - 75%
● ☀ ☀ ☀	74% - 50%
● ● ☀ ☀	49% - 25%
● ● ● ☀	24% - 1%
● ● ● ●	1 - 0%

..FLASH
 ..ON
 ..OFF





The total capacity of FR210PB can be increased to drastically increase runtimes. This is useful for high powered laptops. Simply slide the second unit into place. You will hear an audible click sound when the units are securely connected.



The power bank connected to the device(s) will become the main unit and will display charge level via 4 LED's. The second unit will become the slave and LED's will remain off.



IMPORTANT – Slave Unit

If the slave unit power button is pressed in this setup the charge level displayed via 4 LED's may not be correct.

User Maintenance Instructions



Important – Cleaning

When cleaning FR210PB, FR210CS & FR210DS do not spray cleaner directly onto unit. Spray onto cloth and wipe down the unit. Only spray enough cleaner that the cloth is just damp to the touch.

When cleaning FR210CS or FR210DS disconnect from mains power before wiping down. Do not spray cleaner directly onto unit. Spray onto cloth and wipe down the unit. Only spray enough cleaner that the cloth is just damp to the touch.

Moving & Storage Instructions



Important - Long Term Storage

When storing FR210PB for extended periods of time you **MUST** discharge and recharge the unit at least every 6 months to maintain the integrity of the batteries.

Disposal of Product

This product contains lithium-ion batteries. At the end of the product life cycle the freedom unit must be disposed off at an appropriate waste facility.

Do not dispose of FR210 Series in general waste.



Troubleshooting

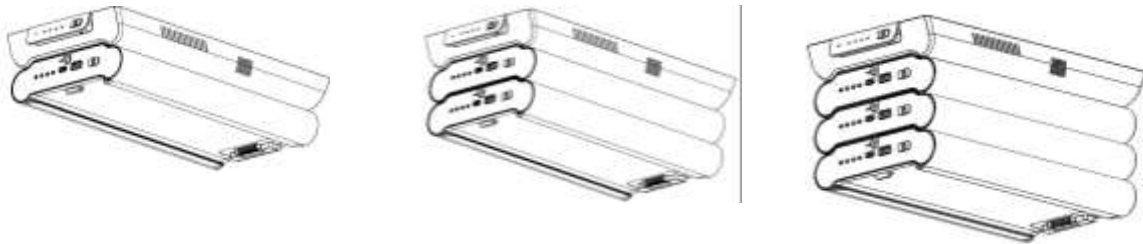
Issue	Cause	Solution
FR210PB		
All four LED's flashing simultaneous	The over-current protection has activated during discharging.	Remove the over-loading device, the output will recover by pressing the power button or recharging the unit via charging station (FR210CS) to rest.
	The over-temperature protection is activated during charging.	The Unit stopped charging as the device operating temperature has been exceeded. The unit will resume function after returning to operating temperature range.
The power bank cannot be charged.	Check FR210CS is plugged in with power available.	Ensure FR210CS is plugged in with power available LED illuminated.
	12 pin connectors may not be making good contact.	Check that no debris is impeding recharging via the 12-pin connector. Remove and readd the power bank.
Your plugged-in device(s) are not charging.	There is no capacity left.	Re-charge the power bank.
	The firmware is in protection mode.	Recharge via FR210CS to reset.
	Trying to recharge immediately after rapid discharge.	The temperature of the cells may be too high, battery protection will not allow the unit to charge until cells are at a safe operating temperature. Allow some time for the unit to cool down before attempting to recharge.
Unit run time is low	The capacity left is low	Re-charge the power bank.
	The working current of devices is larger.	Battery degradation over time/usage
	Battery is close to end of life	Battery degradation over time/usage
Unit is Unresponsive	The Unit software is frozen/unresponsive	Press and hold RESET button for 10 seconds (Rest Button located on the underside of the unit).



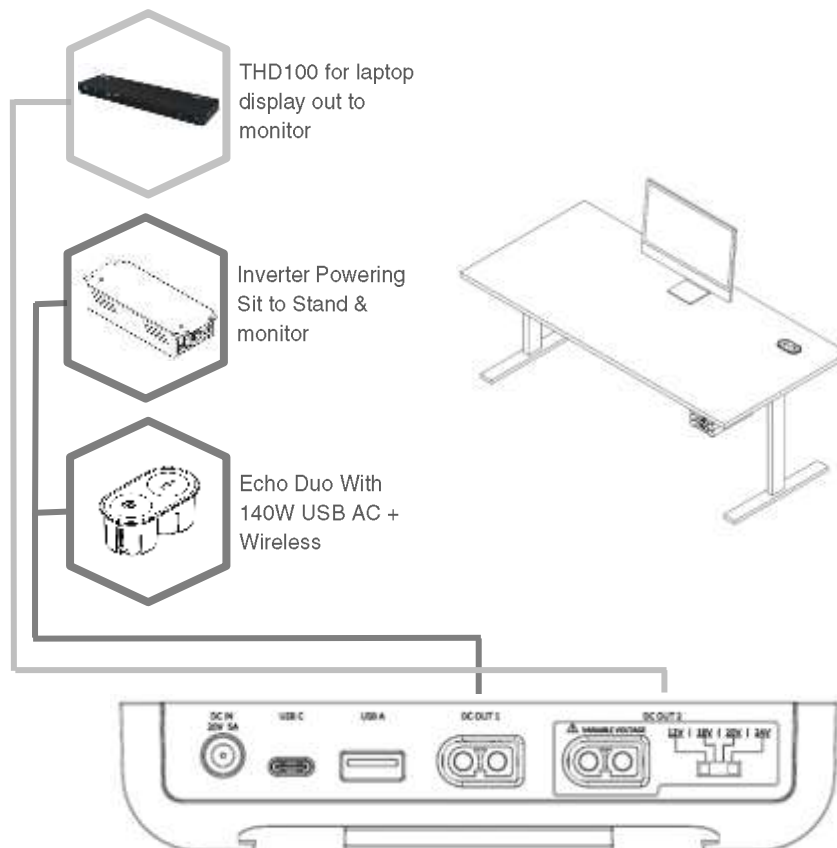
FR210CS		
Power Available LED not on	The unit may not be plugged in correctly	Check that the unit is plugged in correctly and power point is active
FR210DS		
4 LED's Fast Flashing	The Over-current protection is activated, for USB A or USB C port is overloaded	Remove the overloading device, the USB port(s) will recover by pressing power button or recharging to rest.
1 Red LED on	The over-current protection is activated, DC OUT 1 or DC OUT 2 is overloaded	Remove the overloading device(s), Press Power Button to recover. Auto recover will occur after 30 minutes
Unable to output or turn on	Perhaps the 12-pin connector isn't making good contact	Remove and readd FR210PB
	12 pin connector made incorrect contact, activated protection.	Recharge to recover (DC IN at rear)
USB C port and DC OUT ports won't provide output simultaneously	2 nd Power Bank (FR210PB) required	Install second Power Bank (FR210PB). If already installed, try removing and readding.
Unable to discharge or recharge	A High rate of discharge has just been applied increasing the temperature of the cells. Over temperature protection activated to protect the cells	Wait for the cells to cool down before attempting to recharge or discharge
4 LED's immediately start to cycle through 3 times before unit turns off after docking FR210PB	Residual charge left in capacitors or FR210DS trigger low power mode and the unit turns off.	Rest by recharging via 20V, 7.5A DC IN



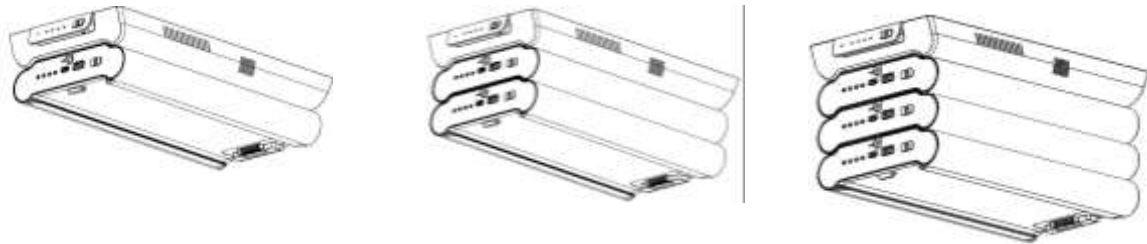
FR210DS Wiring Example: Mobile Workstation



FR210DS with 1x FR210PBP	FR210DS with 2x FR210PBP	FR210DS with 3x FR210PBP
<p>Connected devices: 1 x HP E243i Monitor @ 25W/h (typical)</p> <p>1x THD100 @ 60W/h (Typical)</p> <p>1 x Dell XPS Laptop</p> <p>1 x Sit to Stand Desk</p> <p>Total Power draw (Typical)= 85W/h</p>	<p>Connected devices: 1 x HP E243i Monitor @ 25W/h (typical)</p> <p>1x THD100 @ 60W/h (Typical)</p> <p>1 x Dell XPS Laptop</p> <p>1 x Sit to Stand Desk</p> <p>Total Power draw (Typical)= 85W/h</p>	<p>Connected devices: 1 x HP E243i Monitor @ 25W/h (typical)</p> <p>1x THD100 @ 60W/h (Typical)</p> <p>1 x Dell XPS Laptop</p> <p>1 x Sit to Stand Desk</p> <p>Total Power draw (Typical)= 85W/h</p>
<p>Run time (Typical) calculated $206\text{Wh}/85\text{Wh} = 2 \text{ hours, } 25\text{min}^*$ approx.</p>	<p>Run time (Typical) calculated $412\text{Wh}/85\text{Wh} = 4 \text{ hours, } 50\text{min}^*$ approx.</p>	<p>Run time (Typical) calculated $618\text{Wh}/85\text{Wh} = 7 \text{ hours, } 16\text{min}^*$ approx.</p>



FR210DS Wiring Example: Mobile Stand



FR210DS with 1x FR210PBP	FR210DS with 2x FR210PBP	FR210DS with 3x FR210PBP
<p>Connected devices: 1 x Samsung QE50T @ 91W/h (typical), 149W/h (Max)</p> <p>1x Logitech Meetup @ 18W/h</p> <p>Total Power draw (Typical)= 109W/h</p> <p>Total Power Draw (Max) = 167W/h</p>	<p>Connected devices: 1 x Samsung QE50T @ 91W/h (typical), 149W/h (Max)</p> <p>1x Logitech Meetup @ 18W/h</p> <p>Total Power draw (Typical)= 109W/h</p> <p>Total Power Draw (Max) = 167W/h</p>	<p>Connected devices: 1 x Samsung QE50T @ 91W/h (typical), 149W/h (Max)</p> <p>1x Logitech Meetup @ 18W/h</p> <p>Total Power draw (Typical)= 109W/h</p> <p>Total Power Draw (Max) = 167W/h</p>
<p>Run time (Typical) 206Wh/109Wh = 1 hour, 52min* approx.</p>	<p>Run time (Typical) 412Wh/109Wh = 3 hours, 46min* approx.</p>	<p>Run time (Typical) 618Wh/109Wh = 5 hours, 39min* approx.</p>
<p>Run time (Max) 206Wh/167Wh = 1 hour, 13min* approx.</p>	<p>Run time (Max) 412Wh/167Wh = 2 hour, 27min* approx.</p>	<p>Run time (Max) 618Wh/167Wh = 3 hours, 42min* approx.</p>

