

# 20-Port USB 2.0 Type C Smart Charging Hub

The 20-Port USB 2.0 Type C Smart Charging Hub is a solution for quick charging or sync up to 20 USB Type C devices. This is a perfect tool to effectively save energy and cool down the unit's heat. Also is ideal for large capacity USB station in-house that enables charging and syncing at a time; automatically recharging once the devices connected have consumed their power with remaining 90% (approximately) after fully charged. Places such as school's classroom, businesses conference or meeting in organizations.

## Features

- Supports iOS, Android devices and MacBook Air, MacBook Pro or Chromebook.
- Supports Downstream Facing Port (DFP).
- Compliant with USB Spec. 2.0 / USB Type C Spec 1.2 & USB Battery Charging Spec 1.2
- Enables to provide up to 3A by 12 ports / 1.5A by 8 ports or 2.4A by 20 ports at B/C 1.2 charging output current on each port.
- Supports the smart detection current load of each device being charged. When the current delivery to the device by 3A is lower than 1.5A, the excess current will be distributed to the other port of 1.5A, and the current setting of port of 1.5A will be changed to 3A.
- Extends up to optimum 60 USB Type C devices by connecting cascade port with another 2 units.
- Enables Sync/Charge mode switching upon manually connecting or disconnecting host port.
- Enables Green Energy function automatically shutdown the hub when all devices are fully charged at Charge mode.
- Supports Over Current Protection & Short Circuit Protection on each port.
- For the Over Temperature Protection, if the unit's high temperature is over the setting, it would cut off all the output current immediately. In the meantime, the whole 20 ports LED would be green blinking. (the LED blinking would be reset after reboot the unit)
- Supports  $\pm 15\text{kV}$  (air),  $\pm 8\text{kV}$  (contact) ESD protection on each port.
- Supports 40A (5/50ns) & Peak Pulse Power 45W (8/20 us) Surge and Transient spikes protection on each port.
- The rear fans spec: SUNON Vapo DC Fan; Life Expectancy: 60,000 hours
- Enables to start/cut off the fans automatically according to the temperature's setup. If the board's temperature is higher than the setting, it would start the fans automatically. On the contrary, if the board's temperature is lower from the setting, it would turn off the fans automatically as well.

## Specification

Model No.		USB-2020TCN
Current per Port		DC5V 3A max.
USB Specification		USB 2.0/1.1/1.0 compliant
Current per Port	USB Type-C Spec 1.2 Charging	DC5V 3A x 12 ports & DC5V 1.5A x 8 ports
	B/C Spec 1.2 Charging	DC5V 2.4A x 20 ports
Connector	Upstream	USB Type-C Female
	Downstream	USB Type-C Female x 20
	Cascade	USB Type-C Female
Power Supply		DC19V 15.75A (300W)
Green Energy		Green Energy button
LED	Sync mode	Orange Color x 20
	Charge mode	Charging in progress: Red Color x 20
		Disconnected or Fully charged: Green Color x 20
	Over current protection	Red blinking x 20
	Short circuit protection	Red/Green alternate blinking x 20
	Over temp. protection	Green blinking x 20
Environmental	Operating Temperature	0 ~ 40°C

	Storage Temperature	0 ~ 60°C
	Humidity	0-80% RH, Non-condensing
Cooling Fan		SUNON Vapo DC Fan x 2
Housing		Metal
Dimension (L x W x H)		268 x 102 x 40 mm

