

# **M3 UL20 Series**

## Full Touch Ultra-Rugged Computer

### Accessories Specification

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## Revision

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Release date of version 1.0: Dec. 2019

- Initial distribution

Release date of version 1.1: Feb. 2020

- Rename Pistol Grip to Trigger Handle

Release date of version 1.2: Nov. 2020

- Add accessory list

Release date of version 1.3: Dec. 2020

- Update of Vehicle/Forklift Cradle

Release date of version 1.4: Mar. 2021

- Add accessory list

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## 1. 2 Slot Charging & USB Cradle

- Application Devices: UL20X / UL20F / UL20W



### 1.1 Specification

Model	2 Slot Charging & USB Cradle
I/O	DC / USB-C type Client / USB A Host
Input	DC 12V / 3A
Dimension	(W*D*H) = 125*172.3*96.09 mm
Weight	541g
Compatibility	UL20X / UL20F / UL20W

### 1.2 Use Case

#### 1.2.1 Fast Charging

Charging in about 4 Hours and 30 minutes (20 minutes deviation)

#### 1.2.2 Easy to use

i. Connect UL20 to the Charging Cradle → ii. Charging or Data Connection.



## 2. 2 Slot Charging & Ethernet Cradle

- Application Devices: UL20X / UL20F / UL20W



### 2.1 Specification

Model	2 Slot Charging & Ethernet Cradle
I/O	DC / USB-C type Client / USB A Host / RJ45
Input	DC 12V / 3A
Dimension	(W*D*H) = 125*172.3*96.09 mm
Weight	548g
Compatibility	UL20X / UL20F / UL20W

### 2.2 Use Case

#### 2.2.1 Fast Charging

Charging in about 4 Hours and 30 minutes (20 minutes deviation)

#### 2.2.2 Ethernet Connection and USB Sync

You can use Ethernet Cradle in various business.

USB Sync	Ethernet Connection
Data connection	You can use Local Area Network Via UL20 series with Ethernet Cradle

#### 2.2.3 Easy to use

- i. Connect UL20 to the Ethernet Cradle →
- ii. Charging or Data Connection.



### 3. 8 Slot Charging Cradle

- Application Devices: UL20X / UL20F / UL20W



#### 3.1 Specification

Model	8 Slot Charging Cradle
I/O	DIN4
Input	DC 12V / 12.5A
Dimension	(W*D*H) = 503*172.3*101.6 mm
Weight	1298g
Compatibility	UL20X / UL20F / UL20W

#### 3.2 Use Case

##### 3.2.1 Fast Charging

Charging in about 4 Hours and 30 minutes (20 minutes deviation)

##### 3.2.2 Easy to use

- Connect UL20 to the Charging Cradle
- Charging or Data Connection.



## 4. 8 Slot Charging & Ethernet Cradle

- Application Devices: UL20X / UL20F / UL20W



### 4.1 Specification

Model	8 Slot Charging & Ethernet Cradle
I/O	DIN4 / RJ45
Input	DC 12V / 12.5A
Dimension	(W*D*H) = 503*172.3*101.6 mm
Weight	1317g
Compatibility	UL20X / UL20F / UL20W

### 4.2 Use Case

#### 4.2.1 Fast Charging

Charging in about 4 Hours and 30 minutes (20 minutes deviation)

#### 4.2.2 Ethernet Connection 4 Devices

You can use Ethernet Cradle in various business.

USB Sync	Ethernet Connection
Data connection	You can use Local Area Network Via UL20 series with 8 slot Ethernet Cradle

#### 4.2.3 Easy to use

- i. Connect UL20 to the 8 slot Ethernet Cradle →
- ii. Charging or Data Connection.





## 5. Trigger Handle

- Application Devices: UL20X / UL20F / UL20W



### 5.1 Specification

Model	Trigger Handle
I/O	N/A
Input	N/A
Dimension	(W*D*H) =84.37*115.91*148.07 mm
Weight	103g
Compatibility	UL20X / UL20F / UL20W

### 5.2 Use Case

#### 5.2.1 Formal environment

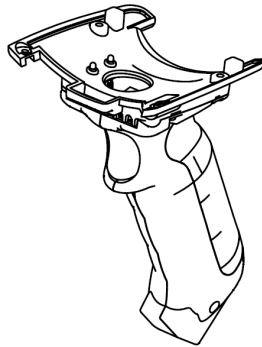
The trigger has essential functions properly in industrial environments.  
The design is ergonomically made by measurement in mechanical team.

#### 5.2.2 Easy to use

- Connect UL20 to the Trigger →
- Reading barcodes

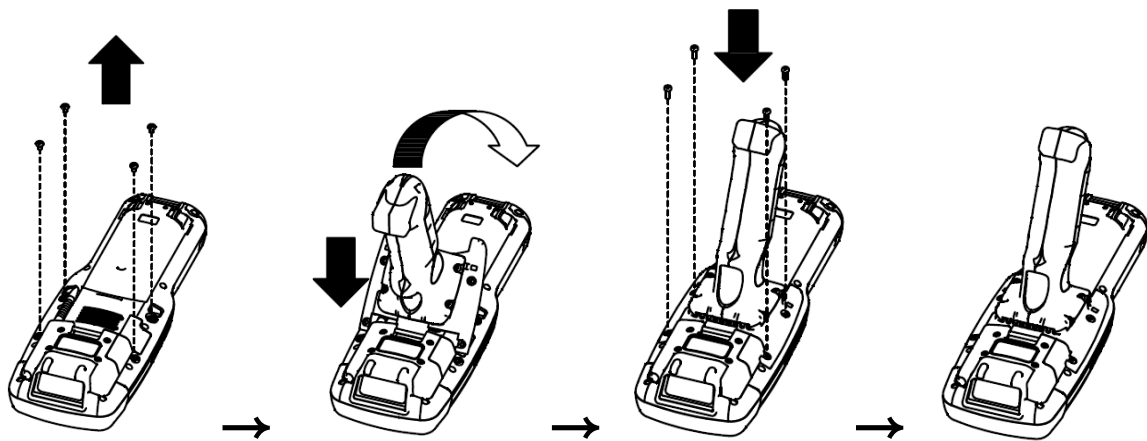


### 5.2.3 How to combine



(screw – 4ea)

- Trigger Handle Components:



- Loosen the four screws on the bottom of the product.
- Insert the Trigger Handle into the shaft at the bottom of the camera.
- Assemble with 4 screws supplied with the Trigger Handle.
- Installation of Trigger Handle.

## 6. Wire Plate

- Application Devices : UL20X / UL20F / UL20W



### 6.1 Specification

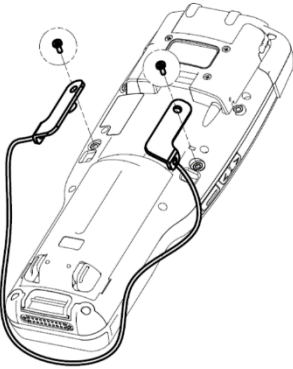
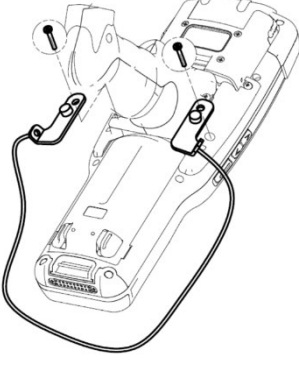
Model	Wire Plate
I/O	N/A
Input	N/A
Dimension	Wire rope : 1m / 2m
Weight	25g
Compatibility	UL20X / UL20F / UL20W

### 6.2 Use Case

#### 6.2.1 Easy to use

Wire plate allows you to move and use products conveniently by hanging them around your shoulders or neck without special fabric cases

#### 6.2.2 How to combine

 <p style="text-align: center;">UL20 only</p>	 <p style="text-align: center;">UL20 + Trigger Handle</p>
<p>Remove the old screw from the bottom of the product and assemble it as shown using the <b>short screw</b> for the wire plate.</p>	<p>Remove the old screw from the bottom of the product and assemble it as shown using the <b>long screw</b> for the wire plate.</p>

**Note! As the direction of assembling the wire plate is different, please refer to the picture.**

## 7. Vehicle Cradle

- Application Devices : UL20X / UL20F / UL20W



### 7.1 Specification

Model	Vehicle Cradle
I/O	DC / USB
Input	DC 5V / 2A
Dimension	(W*D*H) =83*72*304 mm
Weight	408g
Compatibility	UL20X / UL20F / UL20W

### 7.2 Use Case

#### 7.2.1 Vehicle environment

- Top holder tightly grip the terminal considering size of the terminal.
- 2 Types Ram mount: Depending on the fixed method, the Ram mount can be purchased and used selectively.

#### 7.2.2 Easy to use

- Use the cradle as described below.



1. Combine the UL20 into a Vehicle charging station.



2. Depending on the method of fixing the cradle, two types of Ram mount can be optionally used. (Vehicle Screw Mount or Vehicle Suction Mount)



3. Connect the Auto Charger Cable to the back of the Vehicle charging station.



4. If necessary, the USB cable can be connected to the back of the Vehicle charging station.

The host cable and the client cable are separated.

- The back of the Vehicle cradle without the Ram mount is shown below.



**Note!**

**The charging stations of the Vehicle cradle and Forklift cradle are the same, but the input power is different and must be used with care.**

## 8. Forklift Cradle

- Application Devices : UL20X / UL20F / UL20W



### 8.1 Specification

Model	Forklift Cradle
I/O	DC / USB
Input	DC 12V / 3A
Dimension	(W*D*H) =83*72*304 mm
Weight	408g
Compatibility	UL20X / UL20F / UL20W

### 8.2 Use Case

#### 8.2.1 Vehicle environment

- Top holder tightly grip the terminal considering size of the terminal.
- There is a dedicated charging cable for forklift cradle.

#### 8.2.2 Easy to use

- Use the cradle as described below.



1. Combine the UL20 into a Forklift charging station.



2. Screw together the double socket Arm mount and the Forklift charging station.



3-1. If the column of the forklift is angled: Attach the clamp base to the double socket Arm mount. (Square Type)



3-2. If the column of the forklift is not angled: Attach the U-bolt base to the double socket Arm mount. (U-bolt Type)



4. Connect the extension input cable and the Forklift Voltage Power Converter to the back of the Forklift charging station.



5. If necessary, the USB cable can be connected to the back of the Forklift charging station.

The host cable and the client cable are separated.

- Attach the cradle to the forklift truck as shown in the picture below.



U-bolt Type Forklift Cradle Kits



Square Type Forklift Cradle Kits

## 9. Hard type Fabric Holster

- Application Devices : UL20X / UL20F / UL20W



- Hard type Fabric Holster with belt, Side attach

### 9.1 Use Case



- Combine the waist belt and side belt to fasten the Holster tightly, making it easy to insert and remove the device.



## 10. Soft type Fabric Holster

- Application Devices : UL20X / UL20F / UL20W



- Soft type Fabric Holster with Strap, belt

### 10.1 Use Case



It is possible to wear it on the waist with a belt, or lightly with a strap for the shoulder. Both are available regardless of trigger handle coupling.

## 11. Battery Charger

- Application Devices : UL20X / UL20F / UL20W



### 11.1 Specification

Model	Battery Charger
I/O	5PIN Connector, DC
Input	DC 12V / 3A
Dimension	(W*D*H) =109.9*177*104.6 mm
Weight	661g
Compatibility	UL20X / UL20F / UL20W

#### 11.1.1 Fast Charging

Charging in about 6 Hours (30 minutes deviation)

#### 11.1.2 Easy to use

- Connect the power supply (using the same power as UL20 2-slot cradle) to the battery charger. The LED on the front of the battery charger is green when the power is connected.



- Insert the battery for UL20 into the battery charger. The LEDs connected to each of the four slots are displayed in red when the battery is charging and green when charging is complete.



## 12. Contacts

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