

## EEZ PSU H24005 wire harness

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## 1. Ethernet cable

Total length	250 (± 5) mm
Type	4 pairs Ethernet, <i>stranded wire</i>
TME	<a href="#">HELUKAT100-FTP-FP</a> or e.g. cut <a href="#">CA00600.00C01</a> to size
Farnell	<a href="#">1602385</a> or e.g. cut <a href="#">1734894</a> to size

### Connectors

Side A	X8	Side B	X18
Housing type	Receptacle, 0.1"	Housing type	See side A
TME	<a href="#">NSR-08</a>	TME	See side A
Farnell	<a href="#">865667</a>	Farnell	See side A



Pin:	Female	Pin	See side A
Pin quantity	8	Pin quantity	7
TME	<a href="#">NDR-T</a>	TME	See side A
Farnell	<a href="#">1022219</a>	Farnell	See side A



Polarising key	Position #3
TME	<a href="#">NSDR-KEY</a>
Farnell	<a href="#">512023</a>



### Wiring

Name	Position	Color / description	Position	Color / description
LED link	1	Brown-white	1	Brown-white
LED act	2	Brown	2	Brown
Shield	3	Blue-white	3	<b>Polarising key</b>
RX+	4	Orange-white	4	Orange-white
RX-	5	Orange	5	Orange
TX+	6	Green-white	6	Green-white
TX-	7	Green	7	Green
+3.3V	8	Blue	8	Blue

### Picture



## 2. Cooling fan cable

Total length	100 (± 5) mm
Type	3 wire, already mounted on the cooling fan
Fan:	TME: <a href="#">MB60251V1-G99</a>



### Connectors

Side A	X6	Side B	N/A
Housing type	Receptacle, 0.1"	Housing type	N/A
TME	<a href="#">MX-6471-031</a>	TME	N/A
Farnell	<a href="#">143127</a>	Farnell	N/A



Pin	Female	Pin	N/A
Pin quantity	3	Pin quantity	0
TME	<a href="#">MX-0850-0114</a>	TME	N/A
Farnell	<a href="#">2063734</a>	Farnell	N/A



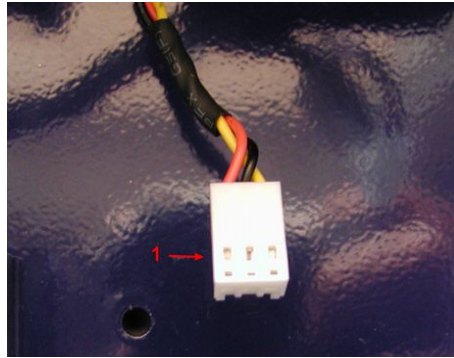
### Additional info

Fan is already equipped with cable that has to be cut to size and terminated with connector

### Wiring

Name	Position	Color / description
12 Vdc	1	Red
GND	2	Black
Sense	3	Yellow

### Picture



### 3. AUX temperature sensor cable

Total length	145 (± 5) mm
Type	Max. 0.35 mm <sup>2</sup> single wire, stranded
TME	E.g. brown: <a href="#">LGY0.35/25-BR</a> (or any other color)
Farnell	E.g. brown: <a href="#">2425402</a> (0.22 mm <sup>2</sup> )
NTC	TME: <a href="#">NTCLE100E3103JB0</a> , Farnell: <a href="#">1187031</a>
Wire	TME: <a href="#">LGY0.35/25-BR</a> , Farnell: <a href="#">2425402</a>

#### Connectors

Side A	X17	Side B	N/A
Housing type	Receptacle 0.1"	Housing type	N/A
TME	<a href="#">MX-6471-021</a>	TME	N/A
Farnell	<a href="#">143126</a>	Farnell	N/A



Pin	Female	Pin	N/A
Pin quantity	2	Pin quantity	0
TME	<a href="#">MX-0850-0114</a>	TME	N/A
Farnell	<a href="#">2063734</a>	Farnell	N/A



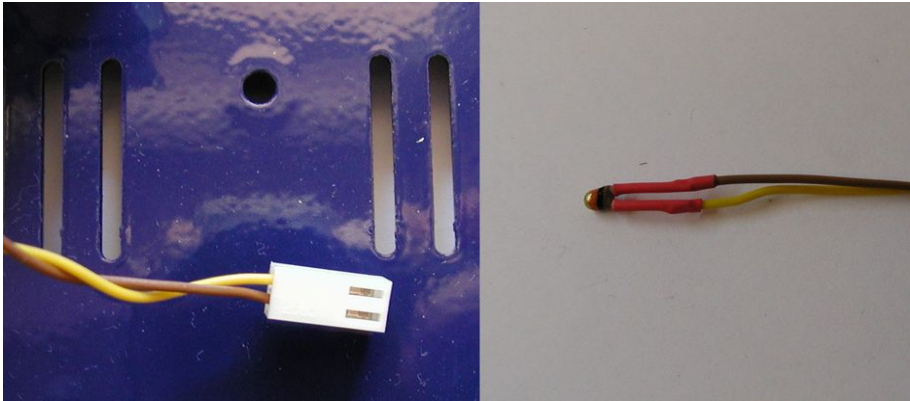
#### Additional info

The temperature sensor is already equipped with cable that has to be terminated with connector

#### Wiring

Name	Position	Color / description
MCU_VCC	1	Any color
NTC	2	Any color

#### Picture



**4. AC switch patch cables**

Total length                    45 (± 5) mm  
 Type                                0.75 mm<sup>2</sup> single wire, stranded, min. 250 VAC  
 TME                                Brown: [LGY0.75/25-BR](#), Blue: [LGY0.75/25-BL](#)  
 Farnell                             Brown: [2528103](#), Blue: [2528092](#)

**Connectors**

Side A	AC output	Side B	AC Switch input
Pin	Female quick disconnect	Pin	See side A
Pin quantity	2	Pin quantity	See side A
TME	<a href="#">BM01148</a> or <a href="#">ST-003/2</a>	TME	See side A
Farnell	<a href="#">3625424</a>	Farnell	See side A



**Additional info**

Required for Schurter [4304.6090](#) IEC inlet (C14, 6765, 10A)

**Wiring1**

Name	Position	Color / description	Position	Color / description
Line	1	Brown	1	Brown

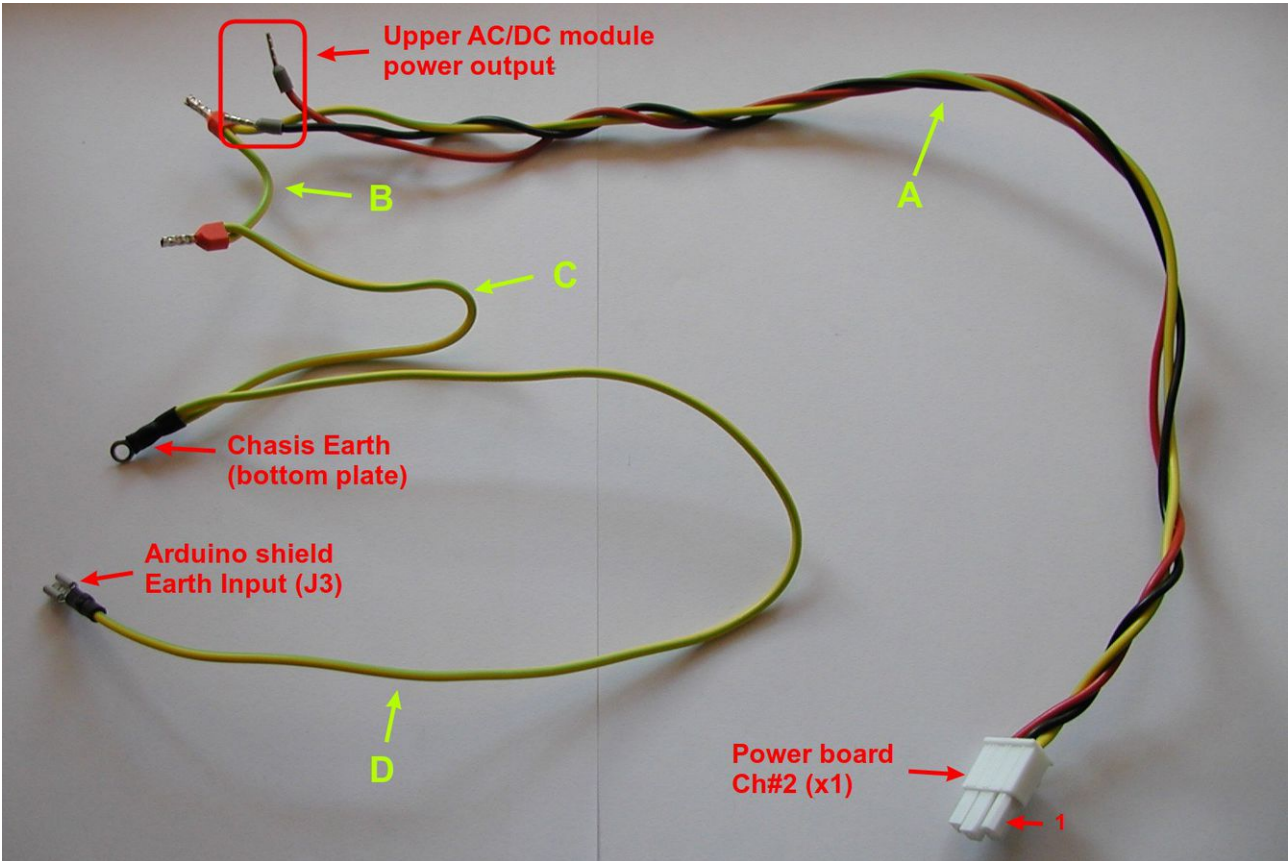
**Wiring2**

Name	Position	Color / description	Position	Color / description
Neutral	1	Blue	1	Blue

**Picture**



5. Cable set #1

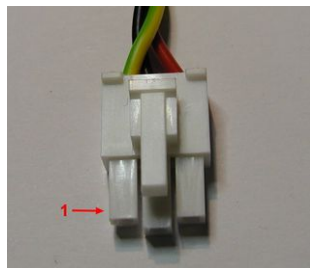


5.1. Section A: Power board (CH2) X1 cable

Length 420 (± 5) mm  
 Type 0.75 mm<sup>2</sup> single wire, stranded, min. 250 VAC  
 TME Red: [LGY0.75/25-RD](#), Black: [LGY0.75/25-BK](#)  
 Green-Yellow: [LGY0.75/25-YL/GR](#)  
 Farnell Red: [2528175](#), Black: [2528082](#), Green-Yellow: [2528140](#)

Connectors

Side A	Power board X1 (Ch2)	Side B	AC/DC module power output
Housing type	Male, Mini-Fit Jr.	Housing type	Ferrule, single wire
TME	<a href="#">MX-5557-03R2</a>	TME	<a href="#">H0.75/14D/GY</a>
Farnell	<a href="#">9963480</a>	Farnell	<a href="#">841195</a>



Pin	Female	Quantity	2
Pin quantity	3	Housing type	Ferrule, twin entry
TME	<a href="#">MX-5556-T3L</a>	TME	<a href="#">H0.75/15D2/GY</a>
Farnell	<a href="#">9732675</a>	Farnell	<a href="#">1121751</a>



Quantity 1

### Wiring

Name	Position	Color / description	Position	Color / description
Earth	1	Green-Yellow	N/A	Ferrule, twin entry
Vin-	2	Black	N/A	Ferrule
Vin+	3	Red	N/A	Ferrule

### 5.2. Section B: AC/DC module Earth

Length	70 (± 1) mm
Type	0.75 mm <sup>2</sup> single wire, stranded, min. 250 VAC
TME	<a href="#">LGY0.75/25-YL/GR</a>
Farnell	<a href="#">2528140</a>

#### Connectors

Side A	AC/DC module Earth output	Side B	AC/DC module Earth (in)
Housing type	Use twin entry ferrule, See B side, <i>Section A</i>	Housing type	Ferrule, twin entry
		TME	<a href="#">H0.75/15D2/GY</a>
		Farnell	<a href="#">1121751</a>
		Quantity	1



### 5.3. Section C: Chassis Earth

Length:	170 (± 5) mm
Type:	0.75 mm <sup>2</sup> single wire, stranded, min. 250 VAC
TME	<a href="#">LGY0.75/25-YL/GR</a>
Farnell	<a href="#">2528140</a>

#### Connectors

Side A	AC/DC module Earth (in)	Side B	Chassis Earth (bottom plate)
Housing type	Use twin entry ferrule, See B side, <i>Section B</i>	Housing type	Non-insulated, Ring terminal, 3 mm
		TME	<a href="#">BM 91103</a>
		Farnell	<a href="#">7356528</a>
		Quantity	1



**5.4. Section D: Arduino Shield Earth**

Length: 350 (± 5) mm  
 Type: 0.75 mm<sup>2</sup> single wire, stranded, min. 250 VAC  
 TME [LGY0.75/25-YL/GR](#)  
 Farnell [2528140](#)

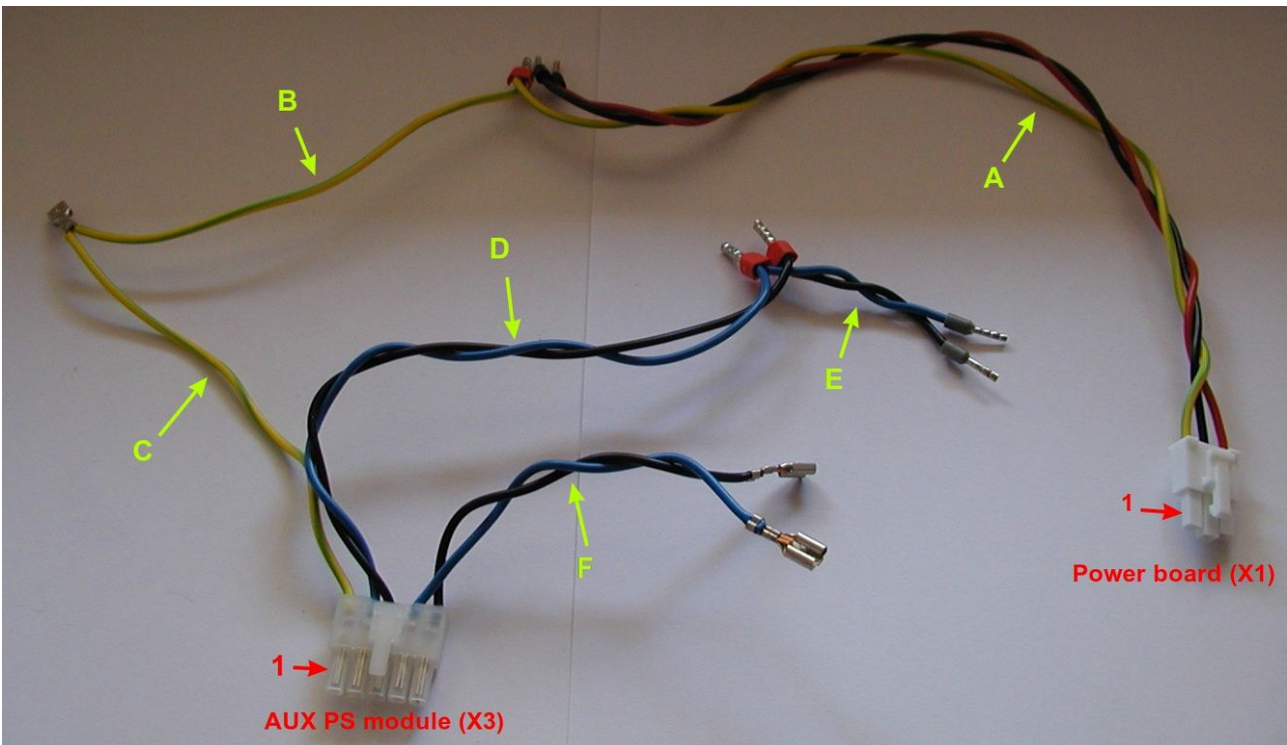
**Connectors**

Side A	Chassis Earth (bottom plate)	Side B	Arduino Shield Earth input (J3)
Housing type	Use ring terminal, See B side, <i>Section C</i>	Housing type	Female quick disconnect
		TME	<a href="#">BM01148</a> or <a href="#">ST-003/2</a>
		Farnell	<a href="#">3625424</a>



Quantity 1

**6. Cable set #2**



**6.1. Section A: Power board X1 cable**

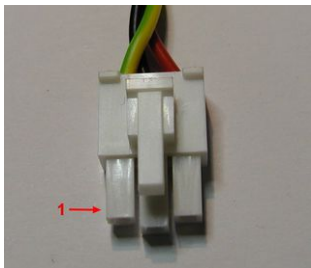
Length 330 (± 5) mm  
 Type 0.75 mm<sup>2</sup> single wire, stranded, min. 250 VAC  
 TME Red: [LGY0.75/25-RD](#), Black: [LGY0.75/25-BK](#)  
 Green-Yellow: [LGY0.75/25-YL/GR](#)  
 Farnell Red: [2528175](#), Black: [2528082](#), Green-Yellow: [2528140](#)

**Connectors**

Side A	Power board X1 (Ch1)	Side B	AC/DC module power output
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Housing type	Male, Mini-Fit Jr.	Housing type	Ferrule, single wire
TME	<a href="#">MX-5557-03R2</a>	TME	<a href="#">H0.75/14D/GY</a>
Farnell	<a href="#">9963480</a>	Farnell	<a href="#">841195</a>



Pin	Female	Quantity	2
Pin quantity	3	Housing type	Ferrule, twin entry
TME	<a href="#">MX-5556-T3L</a>	TME	<a href="#">H0.75/15D2/GY</a>
Farnell	<a href="#">9732675</a>	Farnell	<a href="#">1121751</a>



Quantity 1

**Wiring:**

Name	Position	Color / description	Position	Color / description
Earth	1	Green-Yellow	N/A	Ferrule, twin entry
Vin-	2	Black	N/A	Ferrule
Vin+	3	Red	N/A	Ferrule

**6.2. Section B: AC/DC module Earth**

Length	165 (± 5) mm
Type	0.75 mm <sup>2</sup> single wire, stranded, min. 250 VAC
TME	<a href="#">LGY0.75/25-YL/GR</a>
Farnell	<a href="#">2528140</a>

**Connectors**



Side A	AC/DC power module Earth (in)	Side B	AC inlet Earth
Housing type	Use twin entry ferrule, See B side from <i>Section A</i>	Housing type	Female quick disconnect
		Quantity	1
		TME	<a href="#">BM01148</a> or <a href="#">ST-003/2</a>
		Farnell	<a href="#">3625424</a>



**6.3. Section C: AUX PS module Earth**

Length	115 (± 5) mm
Type	0.75 mm <sup>2</sup> single wire, stranded, min. 250 VAC
TME	<a href="#">LGY0.75/25-YL/GR</a>
Farnell	<a href="#">2528140</a>

**Connectors**

Side A	AC inlet Earth	Side B	AUX PS module (X3)
Housing type	Use Female quick disconnect terminal, See B side, <i>Section B</i>	Housing type	Male, Mini-Fit Jr.
		TME	<a href="#">MX-5557-05R2</a>
		Farnell	<a href="#">9963502</a>
			
		Pin	Female
		Pin quantity	5
		TME	<a href="#">MX-5556-T3L</a>
		Farnell	<a href="#">9732675</a>
			

**Wiring:**

Name	Position	Color / description	Position	Color / description
-	-	Female quick disconnect	1	Earth

**6.4. Section D: Lower AC/DC module power input**

Length	200 (± 5) mm
Type	0.75 mm <sup>2</sup> single wire, stranded, min. 250 VAC
TME	Brown: <a href="#">LGY0.75/25-BR</a> , Blue: <a href="#">LGY0.75/25-BL</a>
Farnell	Brown: <a href="#">2528103</a> , Blue: <a href="#">2528092</a>

**Connectors**

Side A	AUX PS module (X3)	Side B	Lower AC/DC module power input
Housing type	See Side B, <i>Section C</i>	Housing type	Ferrule, twin entry
TME	-	TME	<a href="#">H0.75/15D2/GY</a>
Farnell	-	Farnell	<a href="#">1121751</a>



Pin	Female	Quantity	2
Pin quantity	2		
TME	<a href="#">MX-5556-T3L</a>		
Farnell	<a href="#">9732675</a>		

**Wiring:**

Name	Position	Color / description	Position	Color / description
Neutral	2	Blue	N/A	Ferrule, twin entry
Line	3	Brown	N/A	Ferrule, twin entry

**6.5. Section E: Upper AC/DC module power input**

Length	75 (± 1) mm
Type	0.75 mm <sup>2</sup> single wire, stranded, min. 250 VAC
TME	Brown: <a href="#">LGY0.75/25-BR</a> , Blue: <a href="#">LGY0.75/25-BL</a>
Farnell	Brown: <a href="#">2528103</a> , Blue: <a href="#">2528092</a>

**Connectors**

Side A	Lower AC/DC module power input	Side B	Upper AC/DC module power input
Housing type	Use twin entry ferrule, See B side, <i>Section D</i>	Housing type	Ferrule, single wire
		TME	<a href="#">H0.75/14D/GY</a>
		Farnell	<a href="#">1121751</a>



	Quantity	2
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**6.6. Section F: AUX PS module power input**

Length	110 (± 5) mm
Type	0.75 mm <sup>2</sup> single wire, stranded, min. 250 VAC
TME	Brown: <a href="#">LGY0.75/25-BR</a> , Blue: <a href="#">LGY0.75/25-BL</a>
Farnell	Brown: <a href="#">2528103</a> , Blue: <a href="#">2528092</a>

**Connectors**

Side A	AUX PS module (X3)	Side B	Lower AC/DC module power input
Housing type	See Side B, <i>Section C</i>	Housing type	Female quick disconnect
TME	-	TME	<a href="#">BM01148</a> or <a href="#">ST-003/2</a>
Farnell	-	Farnell	<a href="#">3625424</a>



Pin	Female	Quantity	2
Pin quantity	2		
TME	<a href="#">MX-5556-T3L</a>		
Farnell	<a href="#">9732675</a>		



**Wiring:**

Name	Position	Color / description	Position	Color / description
Neutral	4	Blue	N/A	Female quick disconnect
Line	5	Brown	N/A	Female quick disconnect

## 7. Pre-assembled cables

### 7.1. Arduino shield power cable

Length	300 mm
Type	Ribbon cable with IDC connectors; 10x28AWG
TME	<a href="#">FC10300-0</a>
Farnell	N/A

#### Picture



#### Pinout:

Name	Position	Description
Gnd	1	Ground
Gnd	2	Ground
PWR_DIRECT	3	Triac control (continuous power)
PWR_SSTART	4	Triac control (soft-start)
FAN_SENSE	5	Tachometer output
FAN_PWM	6	Fan PWM speed control
DOUT2	7	Power relay control
+5V	8	+5 V for Arduino Shield
Gnd	9	Ground
+5V	10	+5 V for Arduino Shield

## 7.2. Arduino USB cable











Length	300 or 500 mm
Type	USB Micro to 5-pin receptacle cable
TME	N/A
Farnell	N/A
AliExpress	e.g. <a href="#">High Quality 50CM micro usb 5pin male to 1x 5Pin Female 0.1" USB header PCB motherboard cable</a>



### Pinout:

Name	Position	Color	Description
VCC	1	Red	+5 Vdc
D-	2	White	Data -
D+	3	Green	Data +
GND	4	Black	Ground
Shield	5	Black	Shield

## 8. BOM

Type	Part (Farnell)	Part (TME)	Total	
Receptacle	<a href="#">865667</a>	<a href="#">NSR-08</a>	2	
Receptacle	<a href="#">143127</a>	<a href="#">MX-6471-031</a>	1	
Receptacle	<a href="#">143126</a>	<a href="#">MX-6471-021</a>	1	
Receptacle Mini-Fit Jr.	<a href="#">9963480</a>	<a href="#">MX-5557-03R2</a>	2	
Receptacle Mini-Fit Jr.	<a href="#">9963502</a>	<a href="#">MX-5557-05R2</a>	1	
Pin	<a href="#">1022219</a>	<a href="#">NDR-T</a>	15	
Polarising key	<a href="#">512023</a>	<a href="#">NSDR-KEY</a>	1	
Pin	<a href="#">2063734</a>	<a href="#">MX-0850-0114</a>	5	
Pin	<a href="#">9732675</a>	<a href="#">MX-5556-T3L</a>	11	
Female quick disconnect	<a href="#">3625424</a>	<a href="#">BM01148</a> or <a href="#">ST-003/2</a>	6	

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Ferrule	<a href="#">841195</a>	<a href="#">H0.75/14D/GY</a>	6	
Ferrule, twin entry	<a href="#">1121751</a>	<a href="#">H0.75/15D2/GY</a>	5	
Ring terminal	<a href="#">7356528</a>	<a href="#">BM 91103</a>	1	
Cat5e cable	<a href="#">1602385</a>	<a href="#">HELUKAT100-FTP-FP</a>	0.25 m	
0.75 cm <sup>2</sup> cable (Brown)	<a href="#">2528103</a>	<a href="#">LGY0.75/25-BR</a>	0.43 m	
0.75 cm <sup>2</sup> cable (Blue)	<a href="#">2528092</a>	<a href="#">LGY0.75/25-BL</a>	0.43 m	
0.75 cm <sup>2</sup> cable (Red)	<a href="#">2528175</a>	<a href="#">LGY0.75/25-RD</a>	0.75 m	
0.75 cm <sup>2</sup> cable (Black)	<a href="#">2528082</a>	<a href="#">LGY0.75/25-BK</a>	0.75 m	
0.75 cm <sup>2</sup> cable (Yellow-Green)	<a href="#">2528140</a>	<a href="#">LGY0.75/25-YL/GR</a>	1.61 m	
0.35 cm <sup>2</sup> cable	<a href="#">2425402</a>	<a href="#">LGY0.35/25-BR</a>	0.29 m	
12 Vdc cooling fan	–	<a href="#">MB60251V1-G99</a>	1	
NTC	<a href="#">1187031</a>	<a href="#">NTCLE100E3103JB0</a>	1	
IDC ribbon cable	–	<a href="#">FC10300-0</a>	0.3 m	
USB Micro cable	<a href="#">Shenzhen Wonderwing Electronics Ltd.</a> or search e.g. Aliexpress		0.5 m	

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