

EEZ PSU H24005 wire harness

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1. Ethernet cable

| | |
|--------------|-------------------------------------------------------------------------------------|
| Total length | 260 (± 5) mm |
| Type | 4 pairs Ethernet, <i>stranded</i> wire |
| TME | HELUKAT100-FTP-FP or e.g. cut CA00600.00C01 to size |
| Farnell | 1734894 or e.g. cut 1602385 to size |

Connectors

| Side A | X8 | Side B | X18 |
|--------------|-------------------------|--------------|------------|
| Housing type | Receptacle, 0.1" | Housing type | See side A |
| TME | NSR-08 | TME | See side A |
| Farnell | 865667 | Farnell | See side A |
| Pin: | Female | Pin | See side A |
| Pin quantity | 8 | Pin quantity | 7 |
| TME | NDR-T | TME | See side A |
| Farnell | 1022219 | Farnell | See side 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 | NOT CONNECTED |
| 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: MB60251V1-G99 |

Connectors

| Side A | X4 | Side B | N/A |
|--------------|------------------------------|--------------|-----|
| Housing type | Receptacle, 0.1" | Housing type | N/A |
| TME | MX-6471-031 | TME | N/A |
| Farnell | 143127 | Farnell | N/A |
| Pin | Female | Pin | N/A |
| Pin quantity | 3 | Pin quantity | 0 |
| TME | MX-0850-0114 | TME | N/A |
| Farnell | 2063734 | Farnell | N/A |

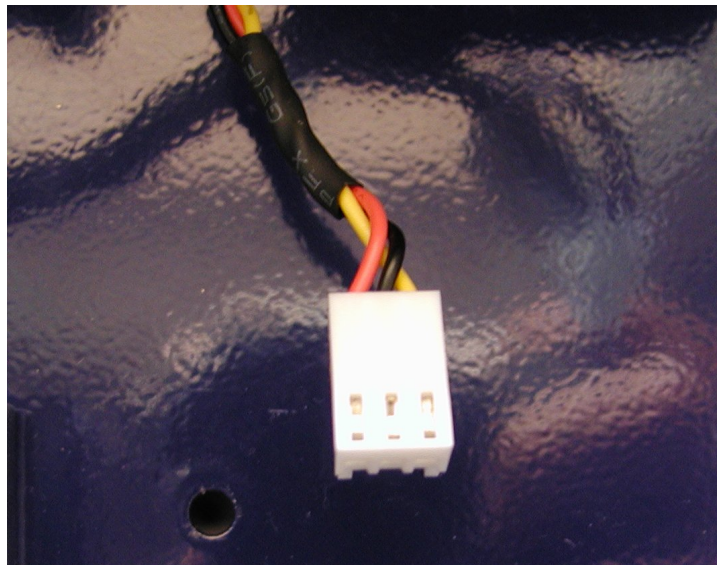
Additional info

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 | 120 (± 5) mm |
| Type | 2 wire, already mounted on the temperature sensor |
| NTC | TME: NTCLE100E3103JB0 |
| Wire | TME: 9921.004100 |

Connectors

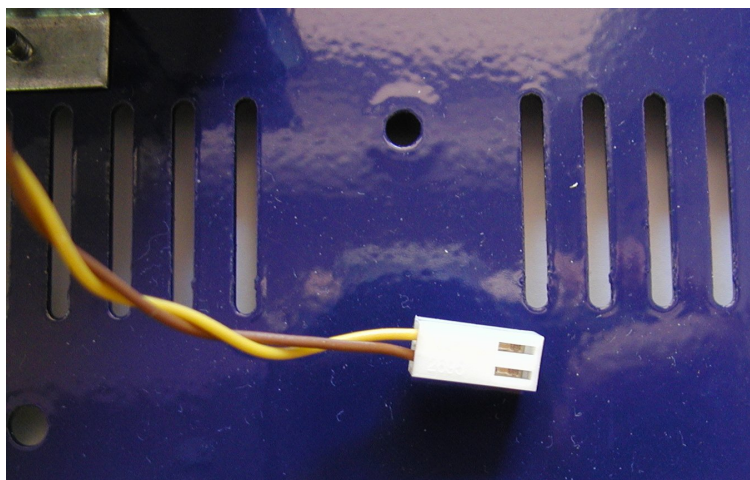
| Side A | X17 | Side B | N/A |
|--------------|------------------------------|--------------|-----|
| Housing type | Receptacle 0.1" | Housing type | N/A |
| TME | MX-6471-021 | TME | N/A |
| Farnell | 143126 | Farnell | N/A |
| Pin | Female | Pin | N/A |
| Pin quantity | 2 | Pin quantity | 0 |
| TME | MX-0850-0114 | TME | N/A |
| Farnell | 2063734 | 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 | Yellow |
| NTC | 2 | Yellow |

Picture**4. AC switch patch cables**

| | |
|--------------|--------------------------------------------------------------------------|
| Total length | 45 (± 5) mm |
| Type | 1.5 mm ² single wire, stranded, min. 300 VAC |
| TME | Brown: LGY1.5/10-BR , Blue: LGY1.5/10-BL |
| Farnell | Brown: 1764967 , Blue: 1764966 |

Connectors

| Side A | AC output | Side B | AC Switch input |
|--------------|-------------------------------|--------------|-----------------|
| Pin | Female quick disconnect | Pin | See side A |
| Pin quantity | 1 | Pin quantity | See side A |
| TME | ST-003/05-20T | TME | See side A |
| Farnell | 2060332 | 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 |

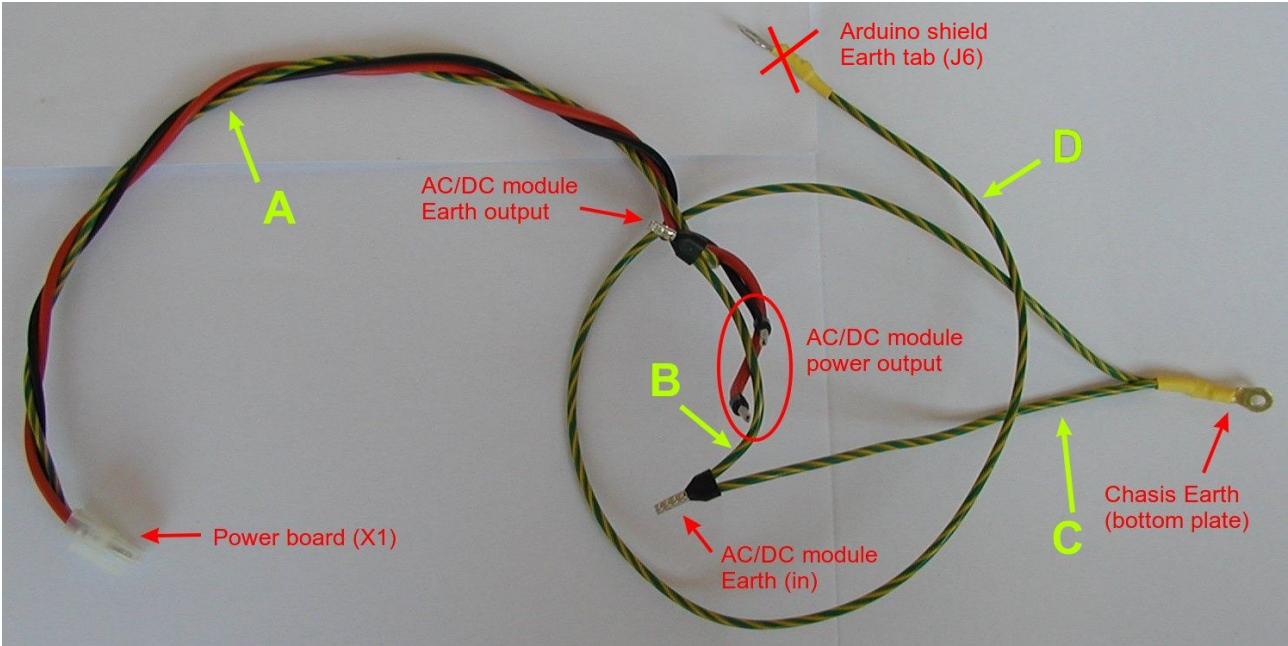
Wiring2

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

Picture

N/A

5. Cable set #1



5.1. Section A: Power board X1 cable

| | |
|---------|--------------------------------------------------------------------------------------------------------------------------|
| Length | 400 (± 5) mm |
| Type | 1.5 mm ² singe wire, stranded, min. 300 VAC |
| TME | Red: LGY1.5/10-RD , Black: LGY1.5/10-BK Green-Yellow: LGY1.5/10-YL/GR |
| Farnell | Red: 1764971 , Black: 1764965 , Green-Yellow: 1764969 |

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 | MX-5557-03R2 | TME | H1.5/14D/BK |
| Farnell | 9963480 | Farnell | 9972307 |
| Pin | Female | Quantity | 2 |
| Pin quantity | 3 | Housing type | Ferrule, twin entry |
| TME | MX-5556-T3L | TME | H1.5/16D2/BK |
| Farnell | 9732675 | Farnell | 1121754 |

Quantity 1

Wiring

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

5.2. Section B: AC/DC module Earth

| | |
|---------|---------------------------------------------------------|
| Length | 70 (\pm 1) mm |
| Type | 1.5 mm ² single wire, stranded, min. 300 VAC |
| TME | LGY1.5/10-YL/GR |
| Farnell | 1764969 |

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 | H1.5/16D2/BK |
| | | Farnell | 1121754 |
| | | Quantity | 1 |

5.3. Section C: Chassis Earth

| | |
|---------|---------------------------------------------------------|
| Length: | 170 (\pm 5) mm |
| Type: | 1.5 mm ² single wire, stranded, min. 300 VAC |
| TME | LGY1.5/10-YL/GR |
| Farnell | 1764969 |

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, 4 mm |
| | | TME | 3804/M.05.00.9 |
| | | Farnell | - |
| | | Quantity | 1 |

5.4. Section D: Arduino Shield Earth

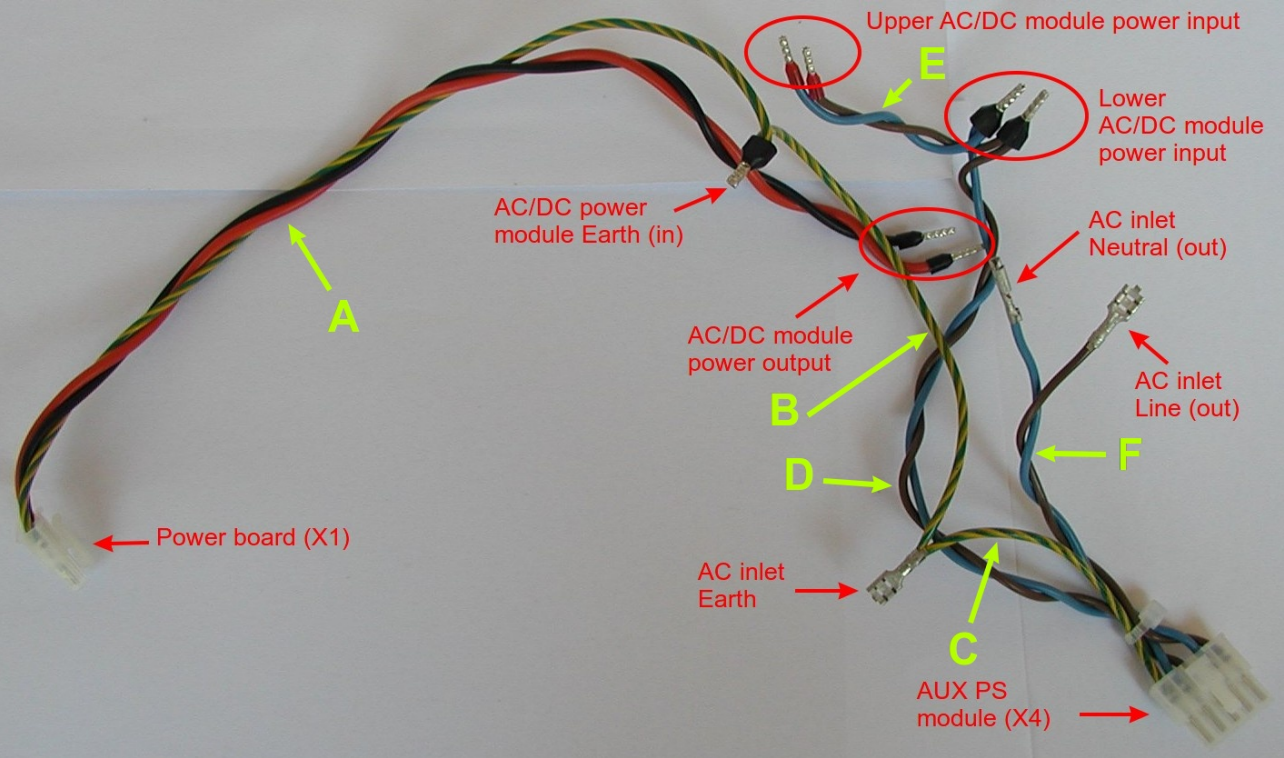
| | |
|---------|---------------------------------------------------------|
| Length: | 500 (\pm 5) mm |
| Type: | 1.5 mm ² single wire, stranded, min. 300 VAC |
| TME | LGY1.5/10-YL/GR |
| Farnell | 1764969 |

Connectors

| Side A | Chassis Earth (bottom plate) | Side B | Arduino Shield Earth tab (J6) |
|--------------|-------------------------------------------------|--------------|-------------------------------|
| Housing type | Use ring terminal, See B side, <i>Section C</i> | Housing type | Female quick disconnect |

| | |
|----------|-------------------------------|
| TME | ST-003/05-20T |
| Farnell | 2060332 |
| Quantity | 1 |

6. Cable set #2



6.1. Section A: Power board X1 cable

| | |
|---------|--------------------------------------------------------------------------------------------------------------------------|
| Length | 330 (± 5) mm |
| Type | 1.5 mm ² singe wire, stranded, min. 300 VAC |
| TME | Red: LGY1.5/10-RD , Black: LGY1.5/10-BK Green-Yellow: LGY1.5/10-YL/GR |
| Farnell | Red: 1764971 , Black: 1764965 , Green-Yellow: 1764969 |

Connectors

| Side A | Power board X1 (Ch1) | Side B | AC/DC module power output |
|--------------|------------------------------|--------------|------------------------------|
| Housing type | Male, Mini-Fit Jr. | Housing type | Ferrule, single wire |
| TME | MX-5557-03R2 | TME | H1.5/14D/BK |
| Farnell | 9963480 | Farnell | 9972307 |
| Pin | Female | Quantity | 2 |
| Pin quantity | 3 | Housing type | Ferrule, twin entry |
| TME | MX-5556-T3L | TME | H1.5/16D2/BK |
| Farnell | 9732675 | Farnell | 1121754 |
| | | Quantity | 1 |

Wiring:

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

6.2. Section B: AC/DC module Earth

| | |
|---------|---------------------------------------------------------|
| Length | 150 (± 5) mm |
| Type | 1.5 mm ² single wire, stranded, min. 300 VAC |
| TME | LGY1.5/10-YL/GR |
| Farnell | 1764969 |

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 | ST-003/05-20T |
| | | Farnell | 2060332 |

6.3. Section C: AUX PS module Earth

| | |
|---------|---------------------------------------------------------|
| Length | 150 (± 5) mm |
| Type | 1.5 mm ² single wire, stranded, min. 300 VAC |
| TME | LGY1.5/10-YL/GR |
| Farnell | 1764969 |

Connectors

| Side A | AC inlet Earth | Side B | AUX PS module (X4) |
|--------------|--------------------------------------------------------------------|--------------|------------------------------|
| Housing type | Use Female quick disconnect terminal, See B side, <i>Section B</i> | Housing type | Male, Mini-Fit Jr. |
| | | TME | MX-5557-05R2 |
| | | Farnell | 9963502 |
| | | Pin | Female |
| | | Pin quantity | 1 |
| | | TME | MX-5556-T3L |
| | | Farnell | 9732675 |

Wiring:

| Name | Position | Color / description | Position | Color / description |
|------|----------|-------------------------|----------|---------------------|
| - | - | Female quick disconnect | 5 | Earth |

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

| | |
|---------|--------------------------------------------------------------------------|
| Length | 200 (± 5) mm |
| Type | 1.5 mm ² single wire, stranded, min. 300 VAC |
| TME | Brown: LGY1.5/10-BR , Blue: LGY1.5/10-BL |
| Farnell | Brown: 1764967 , Blue: 1764966 |

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 | H1.5/16D2/BK |
| Farnell | - | Farnell | 1121754 |
| Pin | Female | Quantity | 2 |
| Pin quantity | 2 | | |
| TME | MX-5556-T3L | | |
| Farnell | 9732675 | | |

Wiring:

| Name | Position | Color / description | Position | Color / description |
|---------|----------|---------------------|----------|---------------------|
| Line | 1 | Brown | N/A | Ferrule, twin entry |
| Neutral | 2 | Blue | N/A | Ferrule, twin entry |

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

| | |
|---------|--------------------------------------------------------------------------|
| Length | 70 (± 1) mm |
| Type | 1.5 mm ² single wire, stranded, min. 300 VAC |
| TME | Brown: LGY1.5/10-BR , Blue: LGY1.5/10-BL |
| Farnell | Brown: 1764967 , Blue: 1764966 |

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 | H1.5/14D/BK |
| | | Farnell | 1905292 |
| | | Quantity | 2 |

6.6. Section F: AUX PS module power input

| | |
|---------|--------------------------------------------------------------------------|
| Length | 110 (± 5) mm |
| Type | 1.5 mm ² single wire, stranded, min. 300 VAC |
| TME | Brown: LGY1.5/10-BR , Blue: LGY1.5/10-BL |
| Farnell | Brown: 1764967 , Blue: 1764966 |

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 | ST-003/05-20T |
| Farnell | - | Farnell | 2060332 |
| Pin | Female | Quantity | 2 |
| Pin quantity | 2 | | |
| TME | MX-5556-T3L | | |
| Farnell | 9732675 | | |

Wiring:

| Name | Position | Color / description | Position | Color / description |
|---------|----------|---------------------|----------|-------------------------|
| Line | 3 | Brown | N/A | Female quick disconnect |
| Neutral | 4 | Blue | 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 | FC10300-0 |
| Farnell | N/A |

Picture



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. High Quality 50CM micro usb 5pin male to 1x 5Pin Female 0.1" USB header PCB motherboard cable |



8. BOM

| Type | Name | Total |
|------------------------------------------|-----------------------------------|--------|
| Receptacle | NSR-08 | 2 |
| Receptacle | MX-6471-031 | 1 |
| Receptacle | MX-6471-021 | 1 |
| Receptacle Mini-Fit Jr. | MX-5557-03R2 | 2 |
| Receptacle Mini-Fit Jr. | MX-5557-05R2 | 1 |
| Pin | NDR-T | 15 |
| Pin | MX-0850-0114 | 5 |
| Pin | MX-5556-T3L | 11 |
| Female quick disconnect | 0 | 8 |
| Ferrule | H1.5/14D/BK | 6 |
| Ferrule, twin entry | H1.5/16D2/BK | 5 |
| Ring terminal | 3804/M.05.00.9 | 1 |
| Cat5e cable | HELUKAT100-FTP-FP | 0.26 m |
| 1.5 cm ² cable (brown) | LGY1.5/10-BR | 0.47 m |
| 1.5 cm ² cable (blue) | LGY1.5/10-BL | 0.47 m |
| 1.5 cm ² cable (red) | LGY1.5/10-RD | 0.73 m |
| 1.5 cm ² cable (black) | LGY1.5/10-BK | 0.73 m |
| 1.5 cm ² cable (yellow-green) | LGY1.5/10-YL/GR | 1.77 m |
| 0.35 cm ² cable | 9921.004100 | 0.24 m |
| 12Vdc cooling fan | MB60251V1-G99 | 1 |
| NTC | NTCLE100E3103JB0 | 1 |
| IDC ribbon cable | FC10300-0 | 0.3 m |
| USB Micro cable | Search Aliexpress | 0.5 m |