

EEZ PSU H24005 wire harness

- [Ethernet cable](#)
- [Cooling fan cable](#)
- [MAIN temperature sensor cable](#)
- [AC switch patch cables](#)
- [Cable set #1](#)
- [Cable set #2](#)
- [Pre-assembled cables](#)
- [BOM](#)

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	1602385 or e.g. cut 1734894 to size

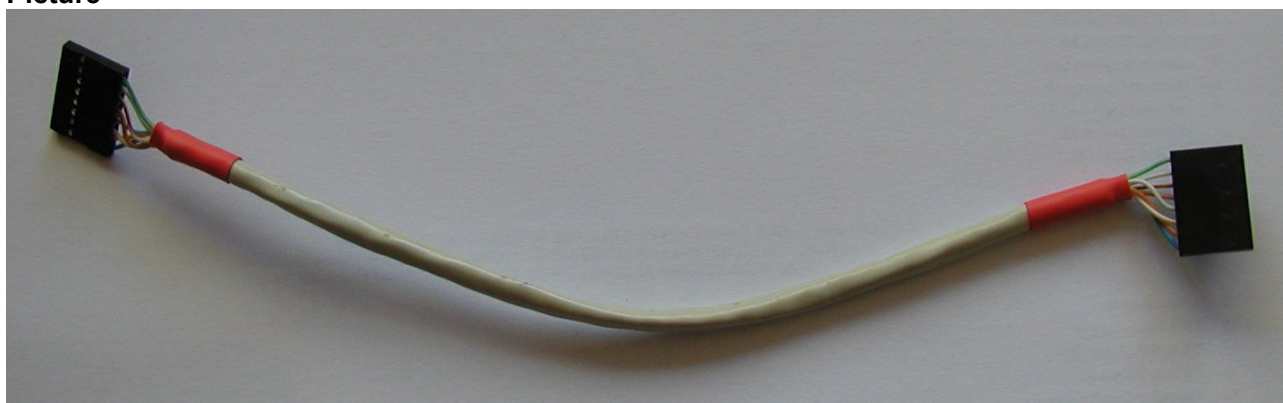
Connectors

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	X6	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

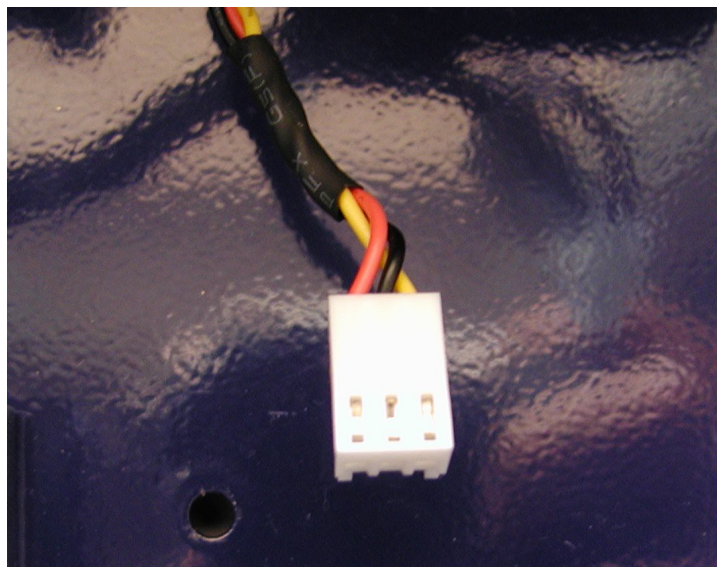
Additional info

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. MAIN 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

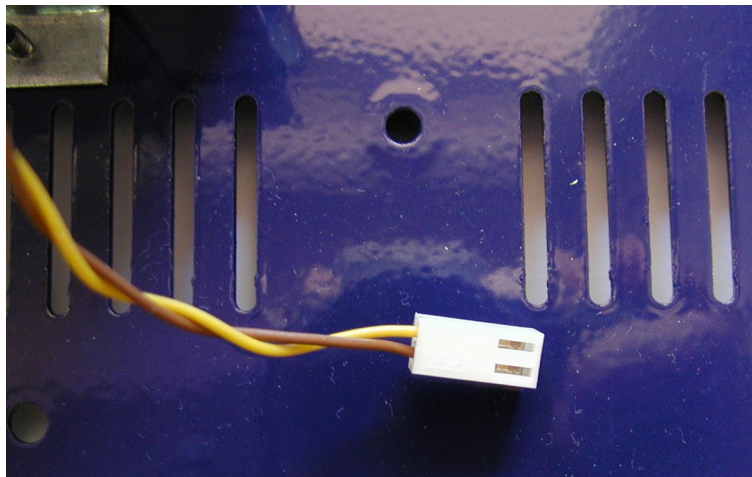
Side A	X17	Side B	N/A
Housing type	Receptacle 0.1"	Housing type	N/A
TME	MX-6471-021	TME	N/A
Farnell	143126	Farnell	N/A
Pin	Female	Pin	N/A
Pin quantity	2	Pin quantity	0
TME	MX-0850-0114	TME	N/A
Farnell	2063734	Farnell	N/A

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

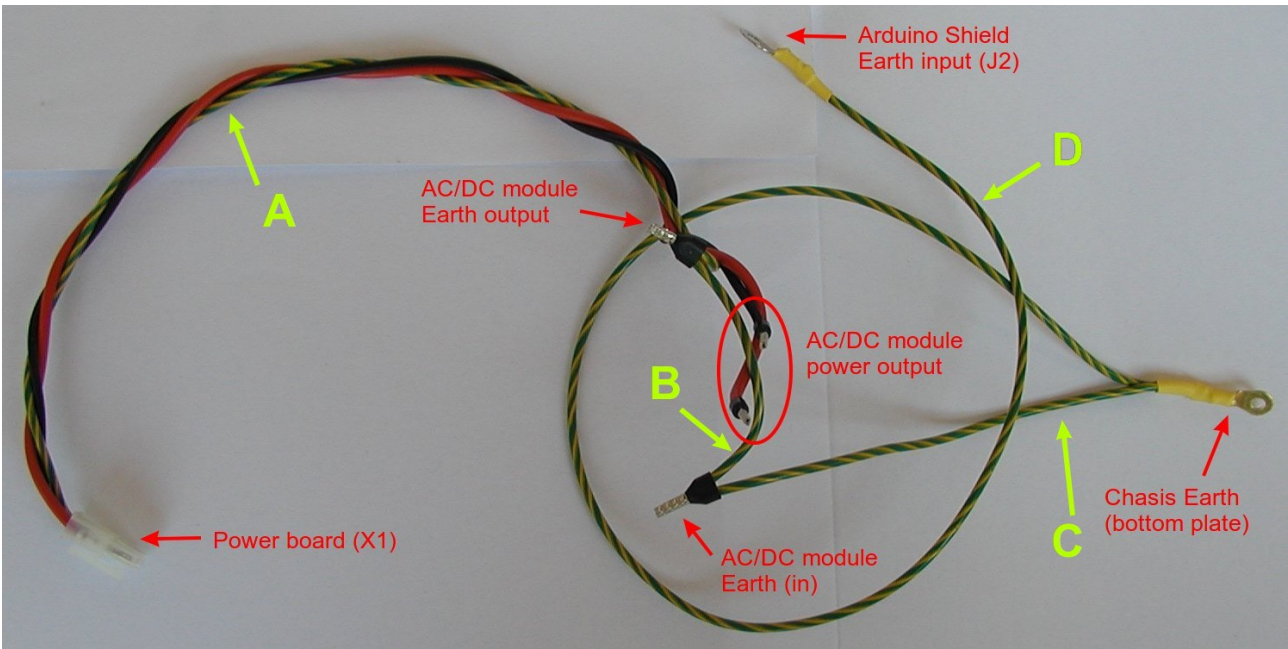
Wiring2

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 single 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	1905292
Pin	Female	Quantity	2
Pin quantity	3	Housing type	Ferrule, double wire
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, single wire
Vin-	2	Black	N/A	Ferrule, single wire
Earth	3	Green-Yellow	N/A	Ferrule, double wire

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 double wire ferrule, See B side, <i>Section A</i>	Housing type	Ferrule, double wire
		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 double wire 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

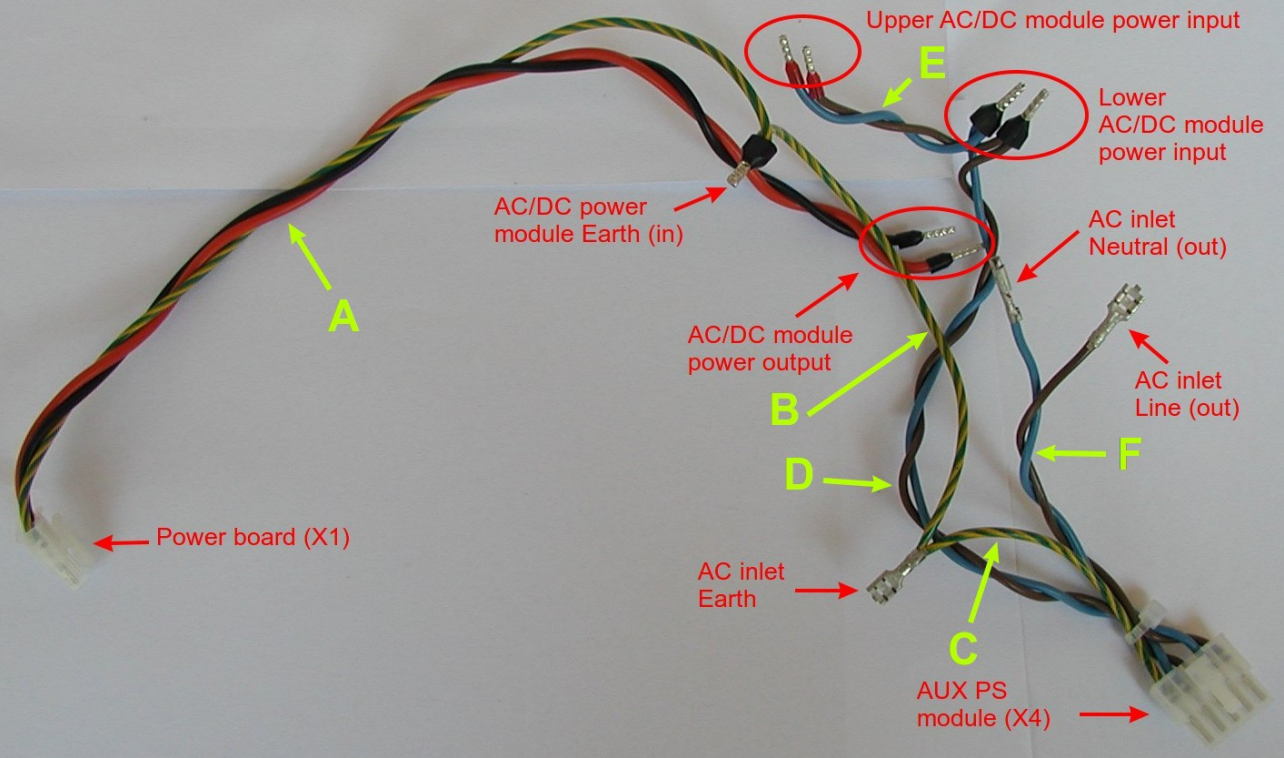
Length:	500 (\pm 5) mm
Type:	1.5 mm ² single wire, stranded, min. 300 VAC
TME	LGY1.5/10-YL/GR
Farnell	1764969

Connectors

Side A	Chassis Earth (bottom plate)	Side B	Arduino Shield Earth input (J2)
Housing type	Use ring terminal, See B side, <i>Section C</i>	Housing type	Non-insulated, Ring terminal, 5 mm

TME	3805/M.05.00.9
Farnell	-
Quantity	1

6. Cable set #2



6.1. Section A: Power board X1 cable

Length	330 (± 5) mm
Type	1.5 mm ² single 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	1905292
Pin	Female	Quantity	2
Pin quantity	3	Housing type	Ferrule, double wire
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, single wire
Vin-	2	Black	N/A	Ferrule, single wire
Earth	3	Green-Yellow	N/A	Ferrule, double wire

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 double wire 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 (X4)	Side B	Lower AC/DC module power input
Housing type	See Side B, <i>Section C</i>	Housing type	Ferrule, double wire
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, double wire
Neutral	2	Blue	N/A	Ferrule, double wire

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 double wire 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 (X4)	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	ST-003/05-20T	7
Ferrule	H1.5/14D/BK	6
Ferrule	H1.5/16D2/BK	5
Ring terminal	3804/M.05.00.9	1
Ring terminal	3805/M.05.00.9	1
Cat5e cable	HELUKAT100-FTP-FP	0.26 m
1.5 cm ² cable	LGY1.5/10-BR	0.47 m
1.5 cm ² cable	LGY1.5/10-BL	0.47 m
1.5 cm ² cable	LGY1.5/10-RD	0.73 m
1.5 cm ² cable	LGY1.5/10-BK	0.73 m
1.5 cm ² cable	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