

# AME Series

## Mating harness

Model	Harness model #	Contents
AME	H-SN-58	Harness for functions (AUX, GI, PR, INFO (for -I3 option)) in CN1
	H-SN-59	Harness for functions in CN3 (for Output module A-D,J-M)
	H-SN-60	Harness for functions in CN3 (for Output module E4-H4,E-H)
	H-SN-68	Harness for functions in CN3 (for Output module R)
	H-SN-51	Harness for functions in CN2 (for -I3 option)
	H-SN-66	Harness for functions in CN2 (for -I option)
	H-SN-61	Molex housing version of H-SN-58 (for -J3 option)
	H-SN-62	Molex housing version of H-SN-59 (for -J3 option of output module A-D,J-M)
	H-SN-63	Molex housing version of H-SN-60 (for -J3 option of output module E4-H4,E-H)
	H-SN-69	Molex housing version of H-SN-68 (for -J3 option of output module R)
	H-SN-65	Molex housing version of H-SN-51 (for -I3J3 option)
	H-SN-67	Molex housing version of H-SN-66 (for -I3J3 option)
	H-OU-42	Output harness (for -J2 option of output module A-D,K-M)
	H-OU-43	Output harness (for -J2 option of output module E4-H4,E-H,J)
H-OU-52	Output harness (for -J2 option of output module R)	

●Model number

## H-SN-58

Housing : PHDR-10VS (J.S.T.)  
Pin : SPHD-002T-P0.5 (J.S.T.)  
Weight : 8g max

●External view

●Wiring diagram

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG24	orange	500
2	UL1061	AWG24	white	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG24	white	500
5	UL1061	AWG28	green	500
6	UL1061	AWG28	purple	500
7	UL1061	AWG28	pink	500
8	UL1061	AWG28	brown	500
9	UL1061	AWG28	yellow	500
10	UL1061	AWG28	gray	500

●Model number

## H-SN-59

Housing : PHDR-10VS (J.S.T.)  
Pin : SPHD-002T-P0.5 (J.S.T.)  
Weight : 4g max

●External view

●Wiring diagram

●Wire

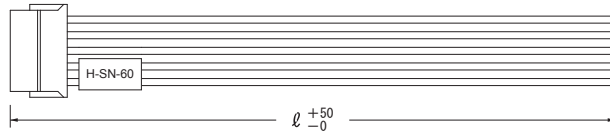
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG28	yellow	500
2	UL1061	AWG28	orange	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG28	gray	500
5	-	-	-	-
6	-	-	-	-
7	-	-	-	-
8	-	-	-	-
9	-	-	-	-
10	-	-	-	-

●Model number

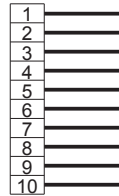
# H-SN-60

Housing : PHDR-10VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 8g max

●External view



●Wiring diagram



●Wire

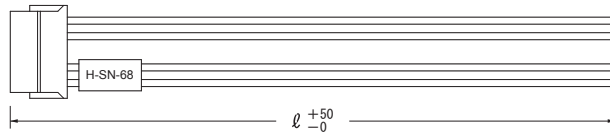
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG28	yellow	500
2	UL1061	AWG28	orange	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG28	gray	500
5	UL1061	AWG28	red	500
6	UL1061	AWG28	black	500
7	UL1061	AWG28	brown	500
8	UL1061	AWG28	green	500
9	UL1061	AWG28	purple	500
10	UL1061	AWG28	white	500

●Model number

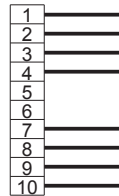
# H-SN-68

Housing : PHDR-10VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 8g max

●External view



●Wiring diagram



●Wire

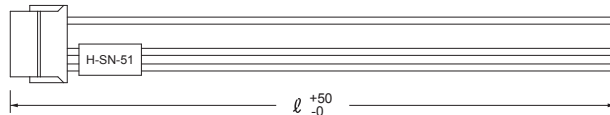
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG28	yellow	500
2	UL1061	AWG28	orange	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG28	gray	500
5	-	-	-	-
6	-	-	-	-
7	UL1061	AWG28	brown	500
8	UL1061	AWG28	green	500
9	UL1061	AWG28	purple	500
10	UL1061	AWG28	white	500

●Model number

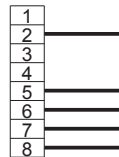
# H-SN-51

Housing : PHDR-08VS (J.S.T.)  
 Pin : SPHD-002T-P0.5 (J.S.T.)  
 Weight : 6g max

●External view



●Wiring diagram



●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	UL1061	AWG28	brown	500
3	-	-	-	-
4	-	-	-	-
5	UL1061	AWG28	blue	500
6	UL1061	AWG28	orange	500
7	UL1061	AWG28	pink	500
8	UL1061	AWG28	brown	500

●Model number  
**H-SN-66**  
Housing : PHDR-08VS (J.S.T)  
Pin : SPHD-002T-P0.5 (J.S.T)  
Weight : 8g max

●External view

●Wiring diagram

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL2651	28	brown	500
2	UL2651	28	red	500
3	UL2651	28	orange	500
4	UL2651	28	yellow	500
5	UL2651	28	green	500
6	UL2651	28	blue	500
7	UL2651	28	purple	500
8	UL2651	28	gray	500

---

●Model number  
**H-SN-61**  
Housing : 51110-1056 (Molex)  
Pin : 50394-8051 (Molex)  
Weight : 8g max

●External view

●Wiring diagram

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG24	orange	500
2	UL1061	AWG24	white	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG24	white	500
5	UL1061	AWG28	green	500
6	UL1061	AWG28	purple	500
7	UL1061	AWG28	pink	500
8	UL1061	AWG28	brown	500
9	UL1061	AWG28	yellow	500
10	UL1061	AWG28	gray	500

---

●Model number  
**H-SN-62**  
Housing : 51110-1056 (Molex)  
Pin : 50394-8051 (Molex)  
Weight : 4g max

●External view

●Wiring diagram

●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG28	yellow	500
2	UL1061	AWG28	orange	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG28	gray	500
5	-	-	-	-
6	-	-	-	-
7	-	-	-	-
8	-	-	-	-
9	-	-	-	-
10	-	-	-	-

November 10, 2020

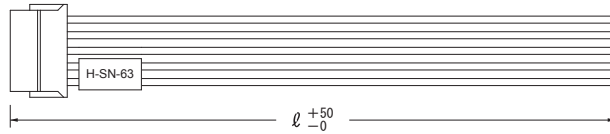
Option-49

●Model number

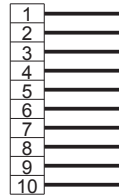
# H-SN-63

Housing : 51110-1056 (Molex)  
 Pin : 50394-8051 (Molex)  
 Weight : 8g max

●External view



●Wiring diagram



●Wire

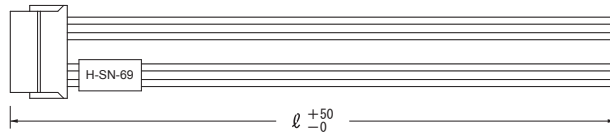
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG28	yellow	500
2	UL1061	AWG28	orange	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG28	gray	500
5	UL1061	AWG28	red	500
6	UL1061	AWG28	black	500
7	UL1061	AWG28	brown	500
8	UL1061	AWG28	green	500
9	UL1061	AWG28	purple	500
10	UL1061	AWG28	white	500

●Model number

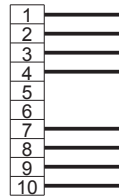
# H-SN-69

Housing : 51110-1056 (Molex)  
 Pin : 50394-8051 (Molex)  
 Weight : 8g max

●External view



●Wiring diagram



●Wire

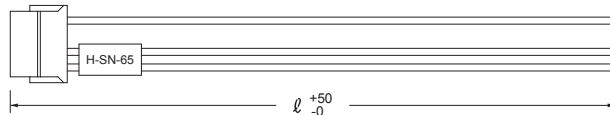
Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1061	AWG28	yellow	500
2	UL1061	AWG28	orange	500
3	UL1061	AWG28	blue	500
4	UL1061	AWG28	gray	500
5	-	-	-	-
6	-	-	-	-
7	UL1061	AWG28	brown	500
8	UL1061	AWG28	green	500
9	UL1061	AWG28	purple	500
10	UL1061	AWG28	white	500

●Model number

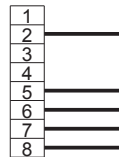
# H-SN-65

Housing : 51110-0856 (Molex)  
 Pin : 50394-8051 (Molex)  
 Weight : 6g max

●External view



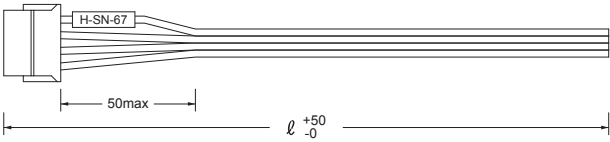
●Wiring diagram

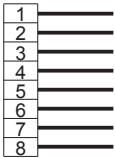


●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	-	-	-	-
2	UL1061	AWG28	brown	500
3	-	-	-	-
4	-	-	-	-
5	UL1061	AWG28	blue	500
6	UL1061	AWG28	orange	500
7	UL1061	AWG28	pink	500
8	UL1061	AWG28	brown	500

●Model number  
**H-SN-67**  
 Housing : 51110-0856 (Molex)  
 Pin : 50394-8051 (Molex)  
 Weight : 8g max

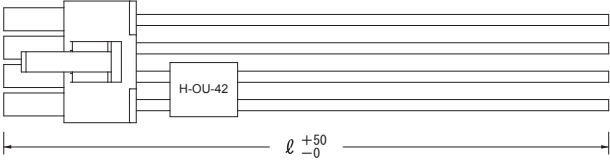
●External view  



●Wiring diagram  


●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL2651	28	brown	500
2	UL2651	28	red	500
3	UL2651	28	orange	500
4	UL2651	28	yellow	500
5	UL2651	28	green	500
6	UL2651	28	blue	500
7	UL2651	28	purple	500
8	UL2651	28	gray	500

●Model number  
**H-OU-42**  
 Housing : 39014041 (Molex)  
 Pin : 45750-3111 (Molex)  
 Weight : 40g max

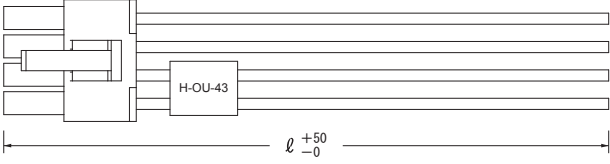
●External view  


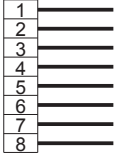
●Wiring diagram  


●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1430	AWG16	black	500
2	UL1430	AWG16	black	500
3	UL1430	AWG16	red	500
4	UL1430	AWG16	red	500

●Model number  
**H-OU-43**  
 Housing : 39012085 (Molex)  
 Pin : 45750-3111 (Molex)  
 Weight : 80g max

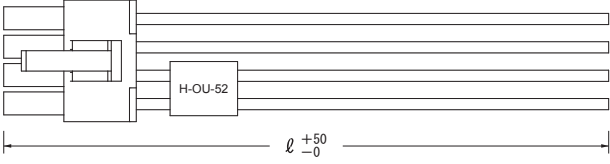
●External view  


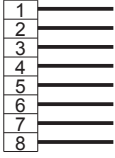
●Wiring diagram  


●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1430	AWG16	black	500
2	UL1430	AWG16	black	500
3	UL1430	AWG16	red	500
4	UL1430	AWG16	red	500
5	UL1430	AWG16	black	500
6	UL1430	AWG16	black	500
7	UL1430	AWG16	red	500
8	UL1430	AWG16	red	500

●Model number  
**H-OU-52**  
 Housing : 39012085 (Molex)  
 Pin : 45750-3111 (Molex)  
 Weight : 80g max

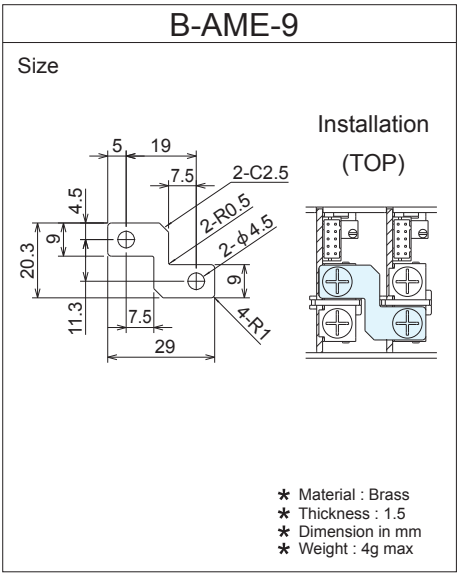
●External view  


●Wiring diagram  


●Wire

Pin #	Wire	AWG	Color	Length ℓ (mm)
1	UL1430	AWG16	black	500
2	UL1430	AWG16	red	500
3	UL1430	AWG16	black	500
4	UL1430	AWG16	red	500
5	UL1430	AWG16	black	500
6	UL1430	AWG16	red	500
7	UL1430	AWG16	black	500
8	UL1430	AWG16	red	500

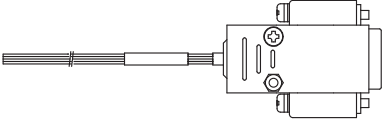
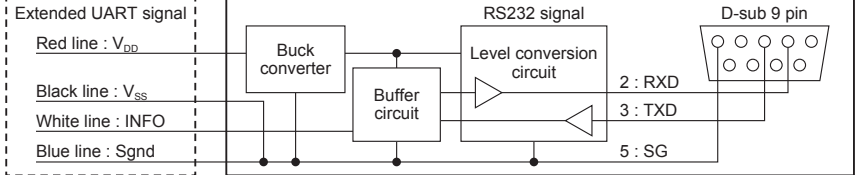
Type	Mating Model	Contents
B-AME-9	AME series	Terminal attachment for series operation as output modules



# Extended UART signal - RS232 signal converter

PCA Series  
AME Series  
RB Series

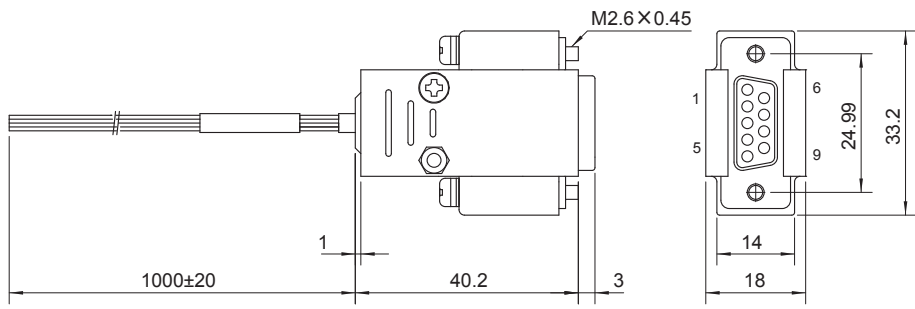
This is a unit to convert Extended UART signal to RS232 signal mutually.

Model number	Applicable power supply	Appearance
CR-PC-1	PCA300F PCA600F PCA1000F  RBC200F <I3 Option>  AME400F AME600F AME800F AME1200F <AI3 Option>	 <p>D-sub 9 Pin Female Connector</p> <p>&lt;Block Diagram&gt;</p> 

## 1 Specification

ITEM	CR-PC-1
<b>ELECTRICAL SPECIFICATIONS</b>	
<b>V<sub>DD</sub> - Vss voltage [V]</b>	DC -0.3 to 14.4
<b>Sink current (Vcc) [mA]</b>	DC 25
<b>INFO - Sgnd voltage [V]</b>	DC -0.3 to 5.5
<b>RXD - SG voltage [V]</b>	DC ±4.2 typ (RXD Loaded with 3kΩ to SG)
<b>RXD output short circuit current [mA]</b>	DC ±60 max
<b>TXD - SG voltage [V]</b>	DC -15 to 15 (Input Resistance 3 to 7kΩ)
<b>Number of connected</b>	7 max
<b>ENVIRONMENT</b>	
<b>Operating temp.,humidity</b>	-20 to 60°C, 20 to 90%RH (Non condensing)
<b>Storage temp.,humidity</b>	-20 to 85°C, 20 to 90%RH (Non condensing)
<b>Vibration</b>	10 - 55Hz 19.6m/s <sup>2</sup> (2G) 3minutes period, 60 minutes each along X, Y, and Z axis
<b>Impact</b>	196.1m/s <sup>2</sup> (20G) 11ms, once each X,Y and Z axis
<b>OTHERS</b>	
<b>Weight</b>	40g max

## 2 External View



- \* Dimensions in mm
- \* Tolerance : ±1
- \* Weight : 40g max
- \* AWG : 28

<Extended UART side>

Line color	Signal name	Contents
Red	V <sub>DD</sub>	Power input
Black	V <sub>SS</sub>	Ground
White	INFO	Extended UART data
Blue	Sgnd	Signal ground

<RS232>

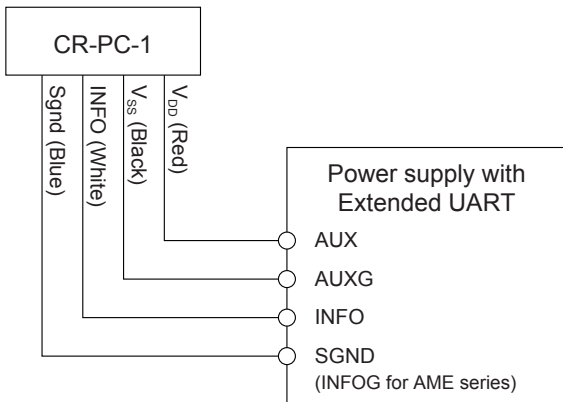
Pin number	Signal name	Contents
1	-	N.C.
2	RXD	RS232 received data
3	TXD	RS232 send data
4	-	N.C.
5	SG	Signal ground
6	-	N.C.
7	-	N.C.
8	-	N.C.
9	-	N.C.
Shell	-	N.C.

# 3 Assembling and Installation Method

## 3.1 Installation method

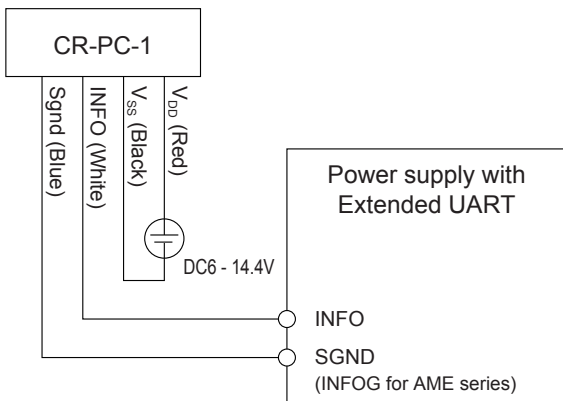
(1) For power supplies with Extended UART which have AUX (12V) power.

- Connect the  $V_{DD}$  line (red) to the AUX (12V) terminal and the  $V_{SS}$  line (black) to the AUXG terminal.
  - Connect the INFO line (white) to the INFO terminal and the Sgnd line (blue) to the SGND terminal (INFOG terminal for AME series).
  - Use a suitable housing and terminal.
- Refer to the instruction manual of the power supply for the pin assignment.



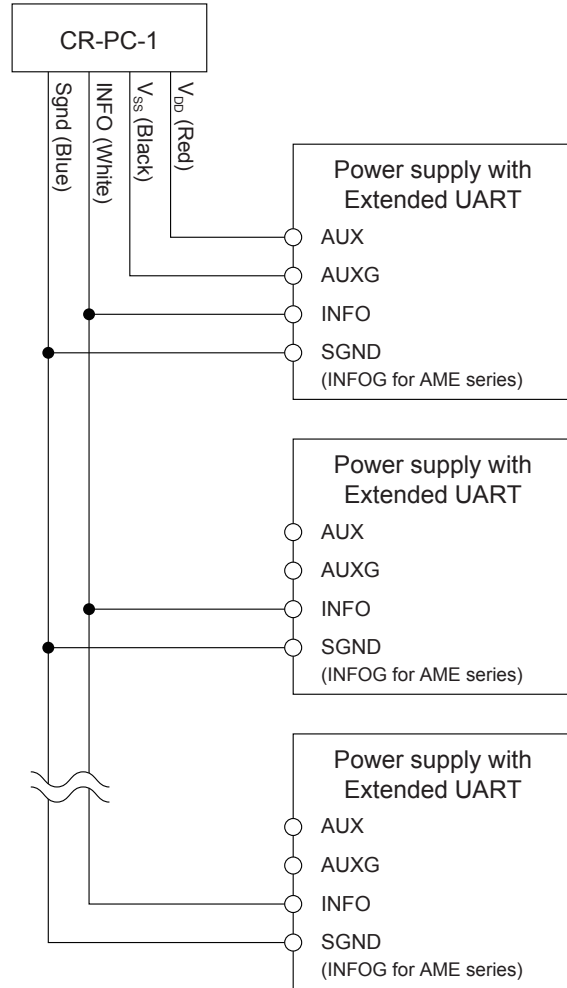
(2) For power supplies with Extended UART which do not have AUX (12V) power.

- Apply a voltage of 6 - 14.4 V between the  $V_{DD}$  line (red) (positive side) and the  $V_{SS}$  line (black) (ground side).
  - Connect the INFO line (white) to the INFO terminal and the Sgnd line (blue) to the SGND terminal (INFOG terminal for AME series).
  - Use a suitable housing and terminal.
- Refer to the instruction manual of the power supply for the pin assignment.



(3) Connecting a CR-PC-1 to multiple power supplies with Extended UART

- Connect one power supply by the method in (1) or (2).
- Then, connect INFO terminals and SGND terminals (INFOG terminals for AME series) in each power supply. Set addresses for each power supply based on the Extended UART Manual.



## 3.2 Warranty term

- The warranty term is 3 years. The failed unit will be replaced if it is under warranty.
- The mechanical damage by insertion and removal of the connector is not covered by warranty.
- The warranty shall be void if the unit is modified or disassembled.
- The failure or the damage by disasters, earthquakes, floods, fires or any other external factors is not covered by warranty.



## 4 Others

### <WARNING>

- Do not use the product in places where there is flammable gas.
- Do not store or use in places where chemicals are vaporized or emitted or where chemicals adhere.
- This is not hot-swappable.
- Do not touch terminals when the product operates.
- Do not cover the product with something like cloth or paper. Do not put any flammable items around the product.

### <CAUTION>

- Cosel is not liable for any consequences arising from use that is different from the stated use, or any use not mentioned.
- Never repair the product since it is dangerous.
- Note that operation in a noisy environment cannot be guaranteed.
- Be careful about static electricity.
- Incorrect wiring can damage the product.  
Also, pay attention to the cable length and layout so that connectors and wires do not come off.
- Handle with care and do not give it a shock such as the dropping.
- Do not use this product for non-applicable power supplies.
- Do not use or store the product in an environment where conductive materials fall on the product or where condensation occurs due to water or moisture.