

IntegraBus
PCR-AAH-xxx
Double USB type-A Charger

Datasheet
Rev. 03

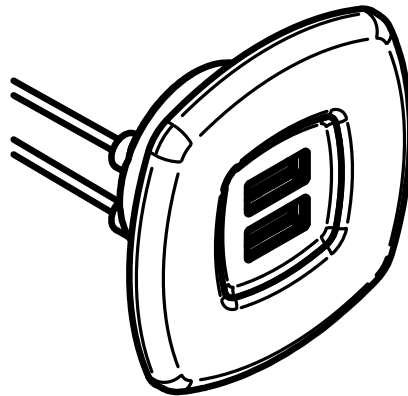


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1. Products Overview

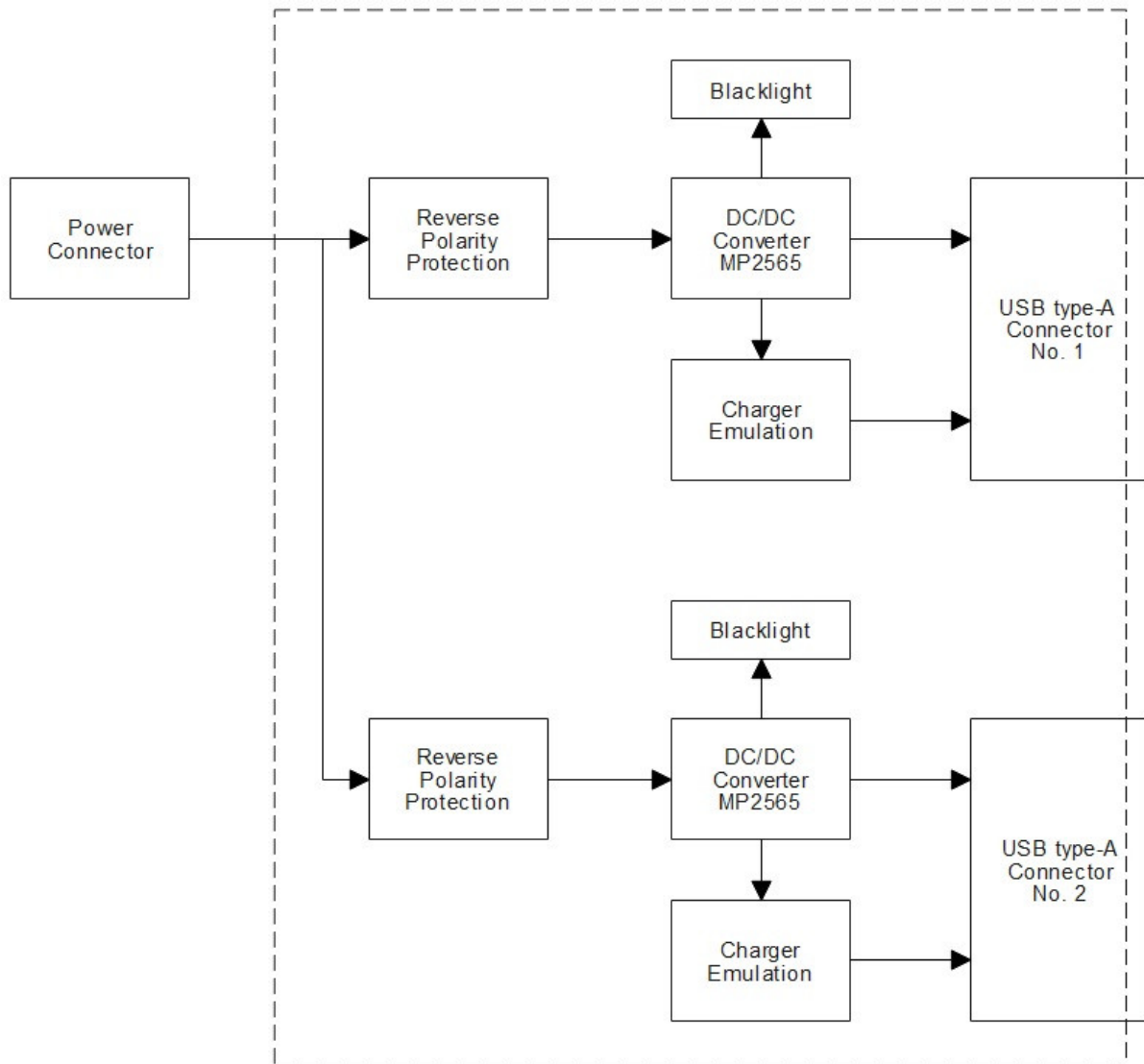
The PCR-AAH-xxx double USB type-A charger module intended for use in buses/coaches. It allows two connected and charged device in same time.

PCR-AAH chargers have two high-power USB type-A ports. These ports can be used with most of the popular mobile devices.

2. Electrical Specification

		Min.	Norm.	Max	
1.	Supply Voltage	8	24	48	V
2.	Operating Temperature	-40		+85	°C
	USB type-A Port				
3.	Output Voltage	4.75	5	5.25	V
4.	Output Current (@ 5V output voltage)			2.5	A
5.	Efficiency of USB-A port	91			%
6.	Output Power			2 x 12.5	W
7.	Backlight		Blue		

3. System Diagram



4. Functional Description

- Two mobile devices can be charged simultaneously.
- Standard USB type-A connector outputs,
- USB type-A output can supply 2.5A current maximum at 5V output voltage,
- Easy to install
- Supported mobile devices:
 - o iPod, iPhone, iPad,
 - o Android phones and tabs
- Supported Charge Profiles On USB type-A connector:

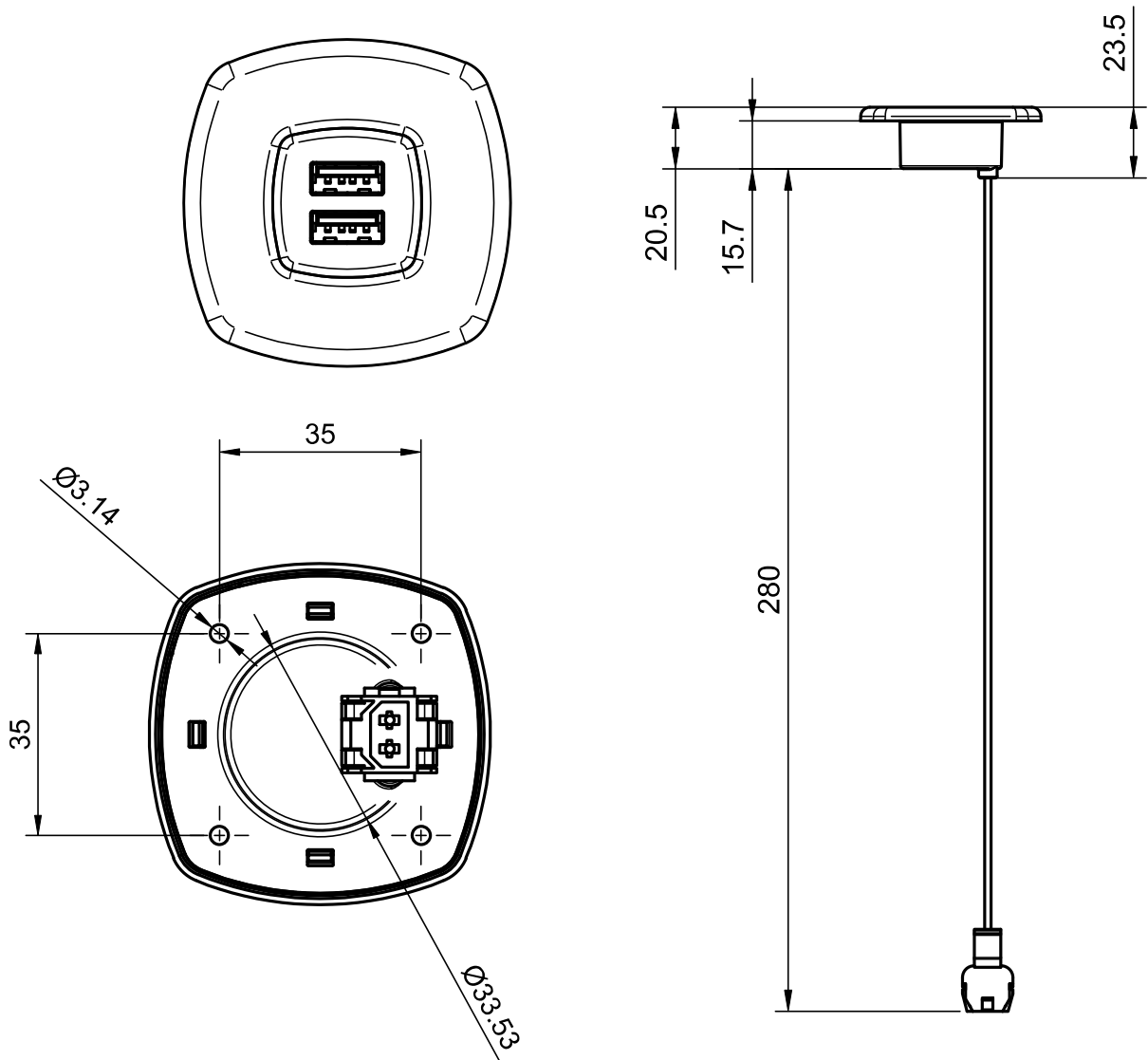
- Divider 1 DCP, (required to apply 2 V and 2.7 V on D+ Line on the D+ and D– Lines)
- Divider 2 DCP, required to apply 2.7 V and 2 V on the D+ and D– Lines
- Divider 3 DCP, required to apply 2.7 V and 2.7 V on the D+ and D– Lines
- BC1.2 DCP, required to short the D+ Line to the D– Line
- Chinese Telecom Standard YD/T 1591-2009 Shorted Mode, required to short the + Line to the D– Line
- 1.2 V on both D+ and D– Lines
- Automotive environment compatible design
- Overcurrent protection, overvoltage protection, thermal protection

5. Certifications

ECE R10 certification:	E-24 10R-041054
ECE R118 certification:	Housing weight is less then 15 g, application of R118 is not necessary on housing, Power cable is R118 certified.

6. Mechanical Specification

- Plastic housing for recessed mounting on surface
- 35 mm hole diameter for snap in installation
- >36 mm hole diameter for normal installation
- Material: PC ABS
- type of connector can be defined individual
- 4 mounting screw hole, mounting diameter 43 mm, screw diameter up to 3,1 mm
- Black housing with opal middle part for best light opacity. More colours are available upon request.



7. Installation

The installation requires a round hole of 35 mm (1.38") diameter.

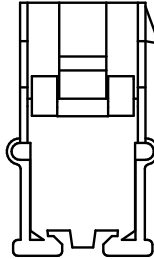
8. Ordering Codes

		PCR - AAH -
PCR	Procharger Recessed Mount charger	←
AAH	Double USB type-A charger High power	←
Connector options:		←
T	Tyco JPT connector	
M	Molex Microfit 3.0(TM) connector	
F	FF250 connector	
X	No connector	
Wire length options:		←
03	300mm	
08	800mm	
10	1000mm	
16	1600mm	
Cable protection options:		←
S	Shrinking tube	
N	Plastic protector tube	
X	No additional cable protection	

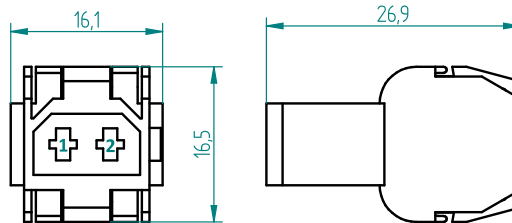
9. Connector Pinouts

Connector option “ - T”:

Housing: Tyco 964586
 Terminal: Tyco 964273-2

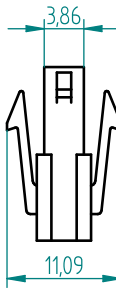


Pin	Wire	Function
1	RED	+12 – 24V Input
2	BLACK	GND Input

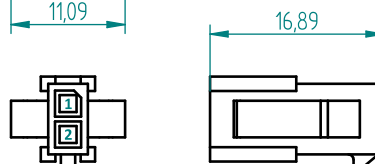


Connector option “ - M”:

Housing: Molex 430200208
 Terminal: Molex 43031

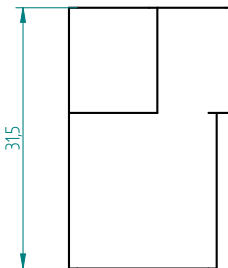


Pin	Wire	Function
1	RED	+12 – 24V Input
2	BLACK	GND Input

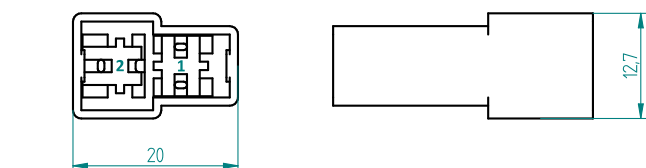


Connector option “ - F”:

Housing: Tyco 180908
 Terminal: Tyco 293041



Pin	Wire	Function
1	RED	+12 – 24V Input
2	BLACK	GND Input



10.Document History

rev	History	Date	Author
R03	Updated drawings Bandaged tape cable option has been removed	2023.09.20.	epapp
R02	Updated electrical specifications	2021.10.01.	epapp
R01	First release	2020.12.03.	epapp