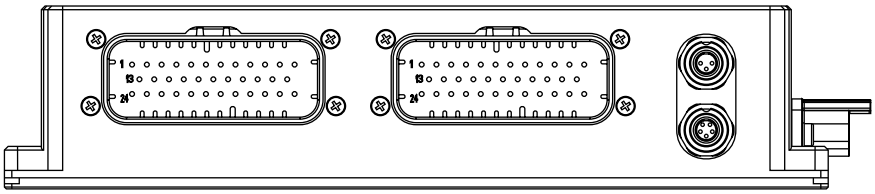
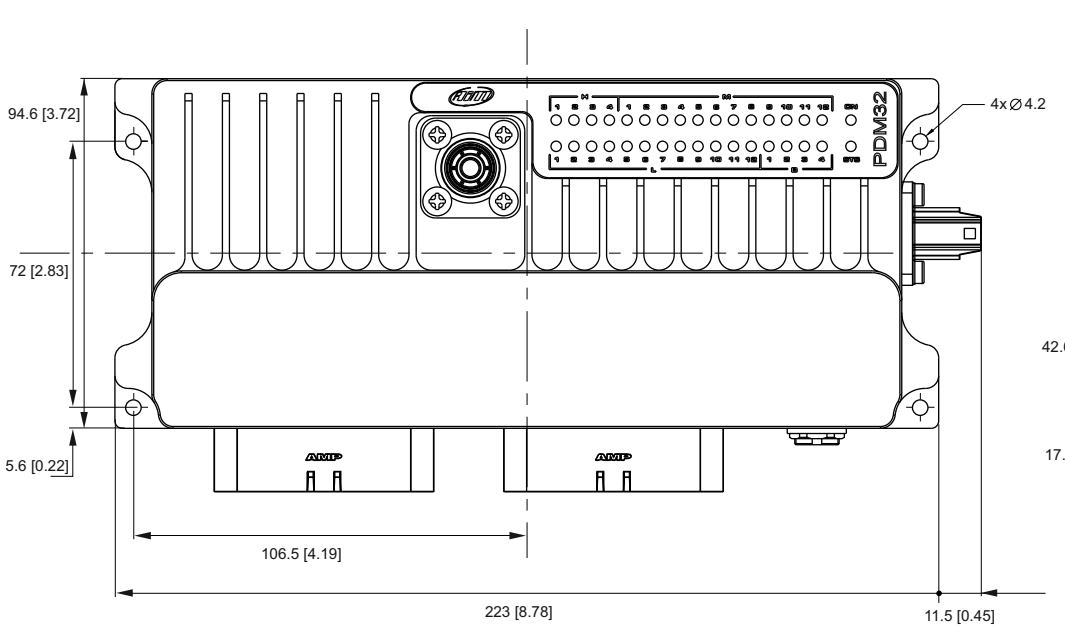
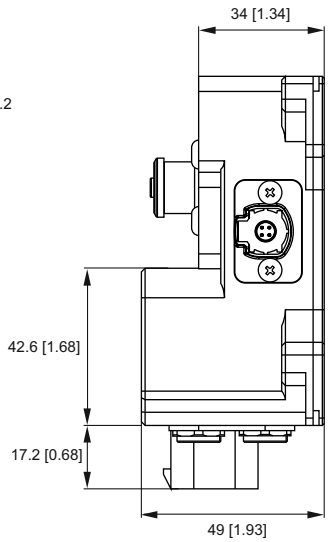
AiM PDM32

Power Distribution Module



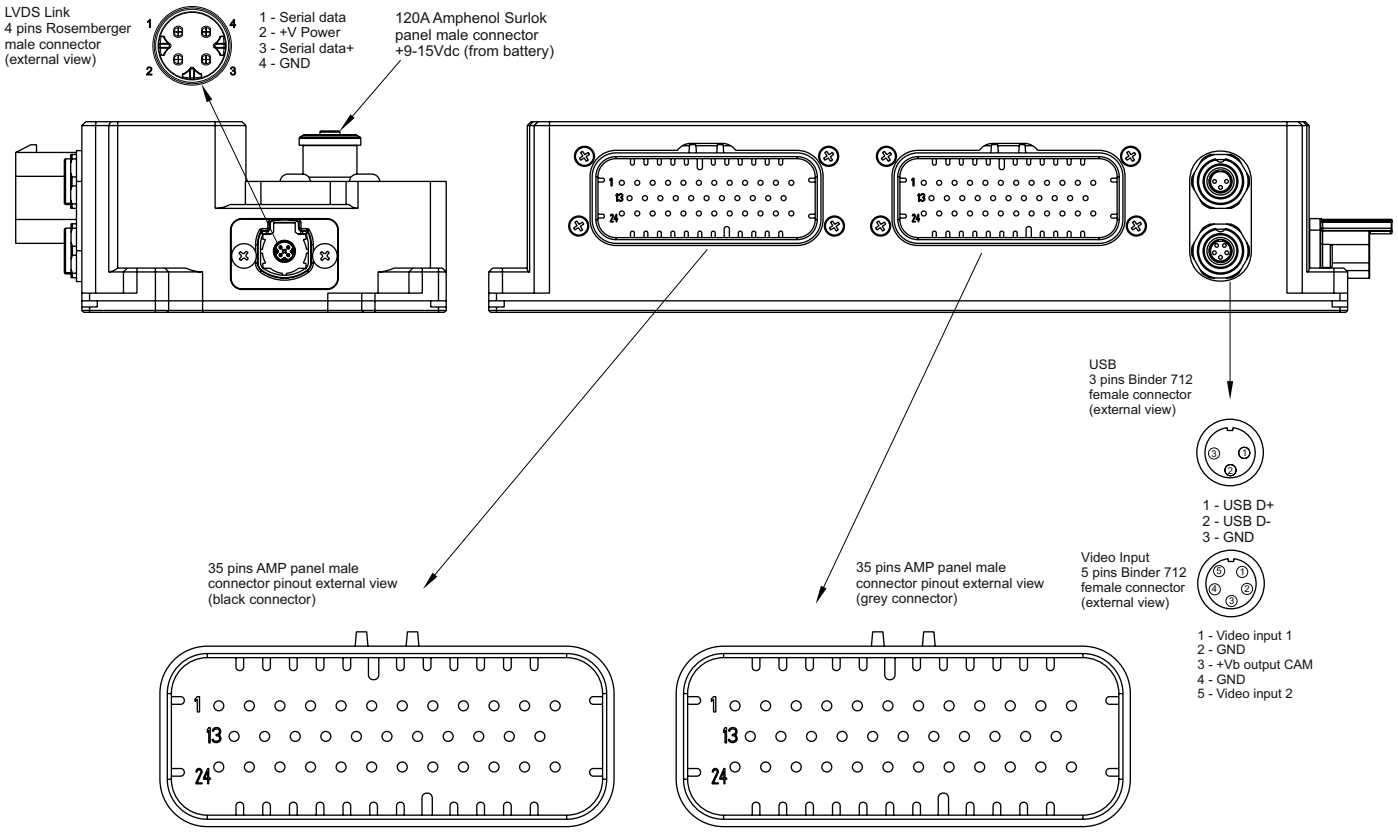




Technical specifications

LEDs	32 RGB LEDs + 1 PDM ON + 1PDM STS (Status)
Inputs	14 fully configurable, recorded at max 500 Hz each: ▪ 8 analog (0-5V ; 0-12V)/digital inputs ▪ 4 digital inputs ▪ 2 speed inputs
Power outputs	1 with serie diode rated up to 20 A 3 rated up to 20 A (high side) 12 rated up to 15 A (high side) 12 rated up to 10 A (high side) 4 rated up to 35 A (high side/half bridge/low side/configurable PWM at max 500 Hz) Protected for: over voltage, under voltage, short circuit, over current, over temperature Total max current: 120 A
Power supply	9-15 V
Lin bus	1
CAN connections	3
Internal memory	4 GB
External modules	GPS09c, Channel Expansion, TC Hub, Lambda Controller, SmartyCam 3 Series, Formula Steering Wheel, Memory Module, K Keypads (or equivalent)
External Analog Camera input	2
Connectors	2 AMP connectors + 2 Binder connectors + 1 Amphenol Surlok connector + 1 Rosenberger connector
Remote display connection	1 AiM stream output
Body	Anodized Aluminum
Dimensions	234.5 x 94.6 x 49.5 mm
Weight	761g
Waterproof	IP65

Pinout



PIN	DESCRIPTION	PIN	DESCRIPTION
1 ●	High power output 1	19	Low power output 6
2	Mid power output 1	20	Low power output 7
3	Mid power output 2	21	Low power output 8
4	Mid power output 3	22	CAN AiM High
5	Mid power output 4	23	High power output 2
6	Mid power output 5	24	High power output 3
7	Mid power output 6	25	High power output 3
8	Mid power output 7	26	Channel input 11
9	Mid power output 8	27	Channel input 12
10	GND	28	CAN2 High
11	CAN AiM Low	29	CAN2 Low
12	High power output 2	30	CAN ECU High/RS232TX
13 ●	High power output 1	31	CAN ECU Low/RS232RX
14	Low power output 1	32	+Vb ext CAN
15	Low power output 2	33	+Vb out CAN
16	Low power output 3	34	High power output 4
17	Low power output 4	35	High power output 4
18	Low power output 5		

PIN	DESCRIPTION	PIN	DESCRIPTION
1	Half bridge power output 1	19	Speed 2 input
2	Half bridge power output 1	20	Speed 1 input
3	Low power output 9	21	Channel input 9
4	Mid power output 9	22	Channel input 10
5	Mid power output 10	23	Ignition
6	Low power output 10	24	Half bridge power output 3
7	Low power output 11	25	Half bridge power output 3
8	Mid power output 11	26	Channel input 1
9	Mid power output 12	27	Channel input 2
10	Low power output 12	28	Channel input 3
11	Half bridge power output 2	29	Channel input 4
12	Half bridge power output 2	30	Channel input 5
13	P GND	31	Channel input 6
14	P GND	32	Channel input 7
15	LIN	33	Channel input 8
16	+5V Analog Vreference	34	Half bridge power output 4
17	+Vb output	35	Half bridge power output 4
18	GND		

● High Power Out 1 has internal series diode

Part numbers

Kit PDM32 with GPS and display ❶

With Icons

XC1PDM32D10G050C2	PDM32 + GPS 50 cm + display 10" with iconsv
XC1PDM32D10G130C2	PDM32 + GPS 130 cm + display 10" with icons
XC1PDM32D10G200C2	PDM32 + GPS 200 cm + display 10" with icons
XC1PDM32D10G400C2	PDM32 + GPS 400 cm + display 10" with icons
XC1PDM32D10R200C2	PDM32 + GPS Roof 200 cm + display 10" with icons
XC1PDM32D10R400C2	PDM32 + GPS Roof 400 cm + display 10" with icons
XC1PDM32D06G050C2	PDM32 + GPS 50 cm + display 6" with iconsv
XC1PDM32D06G130C2	PDM32 + GPS 130 cm + display 6" with icons
XC1PDM32D06G200C2	PDM32 + GPS 200 cm + display 6" with icons
XC1PDM32D06G400C2	PDM32 + GPS 400 cm + display 6" with icons
XC1PDM32D06R200C2	PDM32 + GPS Roof 200 cm + display 6" with icons
XC1PDM32D06R400C2	PDM32 + GPS Roof 400 cm + display 6" with icons
XC1PDM32D05G050C2	PDM32 + GPS 50 cm + display 5" with iconsv
XC1PDM32D05G130C2	PDM32 + GPS 130 cm + display 5" with icons
XC1PDM32D05G200C2	PDM32 + GPS 200 cm + display 5" with icons
XC1PDM32D05G400C2	PDM32 + GPS 400 cm + display 5" with icons
XC1PDM32D05R200C2	PDM32 + GPS Roof 200 cm + display 5" with icons
XC1PDM32D05R400C2	PDM32 + GPS Roof 400 cm + display 5" with icons

Without Icons

XC1PDM32D10G050C2NI	PDM32 + GPS 50 cm + display 10" standard (no icons)
XC1PDM32D10G130C2NI	PDM32 + GPS 130 cm + display 10" standard (no icons)
XC1PDM32D10G200C2NI	PDM32 + GPS 200 cm + display 10" standard (no icons)
XC1PDM32D10G400C2NI	PDM32 + GPS 400 cm + display 10" standard (no icons)
XC1PDM32D10R200C2NI	PDM32 + GPS Roof 200 cm + display 10" standard (no icons)
XC1PDM32D10R400C2NI	PDM32 + GPS Roof 400 cm + display 10" standard (no icons)
XC1PDM32D06G050C2NI	PDM32 + GPS 50 cm + display 6" standard (no icons)
XC1PDM32D06G130C2NI	PDM32 + GPS 130 cm + display 6" standard (no icons)
XC1PDM32D06G200C2NI	PDM32 + GPS 200 cm + display 6" standard (no icons)
XC1PDM32D06G400C2NI	PDM32 + GPS 400 cm + display 6" standard (no icons)
XC1PDM32D06R200C2NI	PDM32 + GPS Roof 200 cm + display 6" standard (no icons)
XC1PDM32D06R400C2NI	PDM32 + GPS Roof 400 cm + display 6" standard (no icons)

Part numbers

XC1PDM32D05G050C2NI	PDM32 + GPS 50 cm + display 5" standard (no icons)
XC1PDM32D05G130C2NI	PDM32 + GPS 130 cm + display 5" standard (no icons)
XC1PDM32D05G200C2NI	PDM32 + GPS 200 cm + display 50" standard (no icons)
XC1PDM32D05G400C2NI	PDM32 + GPS 400 cm + display 5" standard (no icons)
XC1PDM32D05R200C2NI	PDM32 + GPS Roof 200 cm + display 5" standard (no icons)
XC1PDM32D05R400C2NI	PDM32 + GPS Roof 400 cm + display 5" standard (no icons)

Kit PDM32 with GPS (no display) ❷

XC1PDM3201G050	PDM32 with GPS 50 cm
XC1PDM3201G130	PDM32 with GPS 130 cm
XC1PDM3201G200	PDM32 with GPS 200 cm
XC1PDM3201G400	PDM32 with GPS 400 cm
XC1PDM3201R200	PDM32 with GPS Roof 200 cm
XC1PDM3201R400	PDM32 with GPS Roof 400 cm

Kit PDM32 (no GPS and no display) ❸

XC1PDM3201	PDM32

PDM displays

XC1D10000	Dash 10" Icons
XC1D10000NI	Dash 10" No Icons
XC1D06000	Dash 6" Icons
XC1D06000NI	Dash 6" No Icons
XC1D05000	Dash 5" Icons
XC1D05000NI	Dash 5" No Icons

Spare parts

FCCA681500	LVDS cable for PDM32 150 cm
FCCA682000	LVDS cable for PDM32 200 cm
FCCA684000	LVDS cable for PDM32 400 cm
5CNM010000	Heavy Duty Amphenol Power connector
5CND7761641	35 pins AMP black connector shell
5CND7761644	35 pins AMP grey connector shell
5CT07705203	Gold plated pin for AMP (single pin)
V02563030	Cable 3M712 USB 250 cm
V02579030	CAN Exp female Binder cable 150 cm

Part numbers

❶ Kit PDM32 with GPS and display

Quantity	Description	Part number		
N. 1	PDM32 Module	**XC1PDM3201**		
		5CND7761641	N. 1 35 pins AMP black connector shell	
		5CND7761644	N. 1 35 pins AMP gray connector shell	
		5CT07705203	N. 70 Gold plated pins for AMP (Part number referred to the single pin)	
N. 1	Display	**XC1D10000**	Dash 10" Icons	
		XC1D10000NI	Dash 10" No Icons	
		XC1D06000	Dash 6" Icons	
		XC1D06000NI	Dash 6" No Icons	
		XC1D05000	Dash 5" Icons	
		XC1D05000NI	Dash 5" No Icons	
N. 1	GPS	**X40GPS090050**	GPS 50 cm	
		X40GPS090130	GPS 130 cm	
		X40GPS090200	GPS 200 cm	
		X40GPS090400	GPS 400 cm	
		X40GPS09R200	GPS Roof 200 cm	
		X40GPS09R400	GPS Roof 400 cm	
N. 1	LVDS cable for PDM32 200 cm	**FCCA682000**		
N. 1	Heavy Duty Amphenol Power connector	**5CNM010000**		
N. 1	Cable 3M712 USB 250 cm	**V02563030**		
N. 1	CAN Exp female Binder cable 150 cm	**V02579030**		

Part numbers

❷ Kit PDM32 with GPS (no display)

Quantity	Description	Part number		
N. 1	PDM32 Module	**XC1PDM3201**		
		5CND7761641	N. 1 35 pins AMP black connector shell	
		5CND7761644	N. 1 35 pins AMP gray connector shell	
		5CT07705203	N. 70 Gold plated pins for AMP (Part number referred to the single pin)	
N. 1	GPS	**X40GPS090050**	GPS 50 cm	
		X40GPS090130	GPS 130 cm	
		X40GPS090200	GPS 200 cm	
		X40GPS090400	GPS 400 cm	
		X40GPS09R200	GPS Roof 200 cm	
		X40GPS09R400	GPS Roof 400 cm	
N. 1	LVDS cable for PDM32 200 cm	**FCCA682000**		
N. 1	Heavy Duty Amphenol Power connector	**5CNM010000**		
N. 1	Cable 3M712 USB 250 cm	**V02563030**		
N. 1	CAN Exp female Binder cable 150 cm	**V02579030**		

Part numbers

❸ Kit PDM32 (no GPS and no display)

Quantity	Description	Part number		
N. 1	PDM32 Module	**XC1PDM3201**		
		5CND7761641	N. 1 35 pins AMP black connector shell	
		5CND7761644	N. 1 35 pins AMP gray connector shell	
		5CT07705203	N. 70 Gold plated pins for AMP (Part number referred to the single pin)	
N. 1	LVDS cable for PDM32 200 cm	**FCCA682000**		
N. 1	Heavy Duty Amphenol Power connector	**5CNM010000**		
N. 1	Cable 3M712 USB 250 cm	**V02563030**		
N. 1	CAN Exp female Binder cable 1.5 m	**V02579030**		