



## **Excellent Performance**

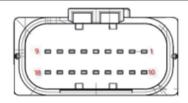
- High-precision voltage measurement of each cell;
- · Reliable output via CAN2.0B digital interface;
- · Supports network multi-node program refresh;
- · Capable of measuring the impedance of a single stack cell;
- · Designed according to automotive electronic standards for high reliability;
- · High integration and small size, suitable for diverse systems;
- Good environmental adaptability, with resistance to high temperature, salt spray, and humidity.

## **Specifications**

MODEL	CVM188-R-A1
Input Voltage Range	9-32VDC, 36V@1h
Number of Channels	188
Voltage Range	-5 ~ 5VDC
Accuracy	< 10mV
Sampling Period	150ms
Insulation Resistance	≥ 20MΩ @ 1000V
Humidity	5-100% RH
Operating Temperature	-40°C ~ 105°C
Altitude	≥ 6500ft
IP Level	IP67
Flammability Rating	V-0
Communication	2*CAN, 250/500kps
Dimensions (W*D*H, inch)	13.8*4.6*1.6
Weight	4.4lb

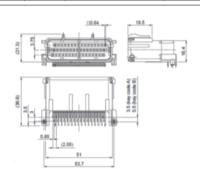
## CVM188-R-A1

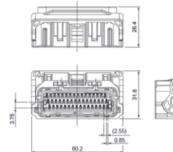
## Schematic Diagram of Connectors



Board Side Model		MX2	L(JAE)	Wiring Side Mo	odel	MX23A18SF1(JAE)			
No.	Labels	Description	No.	Labels	Description	No.	Labels	Description	
1	BAT+	CVM power+	7	NC	/	13	CAN1_JUMP	CAN1 matching resistor	
2	EN	Enable	8	NC	/	14	CAN2H	CAN2 high	
3	CAN1L	CAN1 low	9	RSH+	Splitter+	15	CAN2_JUMP	CAN2 matching resistor	
4	CAN1_GND	CAN1 shield	10	BAT-	CVM power-	16	NC	/	
5	CAN2L	CAN2 low	11	ADDR	CVM address (active low)	17	NC	/	
6	CAN2_GND	CAN2 shield	12	CAN1H	CAN1 high	18	RSH-	Splitter-	

Schematic Diagram of Connectors





			00.2											
Board Side Model			S48B-ZROK-2A-R					Wiring Side Model			48ZRO-B-2A			
No.	P1	P2	Р3	P4	No.	P1	P2	Р3	P4	No.	P1	P2	Р3	P4
#1	VO	V47	V94	V141	#17	V1	V48	V95	V142	#33	V2	V49	V96	V143
#2	V3	V50	V97	V144	#18	V4	V51	V98	V145	#34	V5	V52	V99	V146
#3	V6	V53	V100	V147	#19	V7	V54	V101	V148	#35	V8	V55	V102	V149
#4	V9	V56	V103	V150	#20	V10	V57	V104	V151	#36	V11	V58	V105	V152
#5	V12	V59	V106	V153	#21	V13	V60	V107	V154	#37	V14	V61	V108	V155
#6	V15	V62	V109	V156	#22	V16	V63	V110	V157	#38	V17	V64	V111	V158
#7	V18	V65	V112	V159	#23	V19	V66	V113	V160	#39	V20	V67	V114	V161
#8	V21	V68	V115	V162	#24	V22	V69	V116	V163	#40	V23	V70	V117	V164
#9	V24	V71	V118	V165	#25	V25	V72	V119	V166	#41	V26	V73	V120	V167
#10	V27	V74	V121	V168	#26	V28	V75	V122	V169	#42	V29	V76	V123	V170
#11	V30	V77	V124	V171	#27	V31	V78	V125	V172	#43	V32	V79	V126	V173
#12	V33	V80	V127	V174	#28	V34	V81	V128	V175	#44	V35	V82	V129	V176
#13	V36	V83	V130	V177	#29	V37	V84	V131	V178	#45	V38	V85	V132	V179
#14	V39	V86	V133	V180	#30	V40	V87	V134	V181	#46	V41	V88	V135	V182
#15	V42	V89	V136	V183	#31	V43	V90	V137	V184	#47	V44	V91	V138	V185

V93

V140

V187

#48

V47

V46

V92

V139

V45

V141

V188