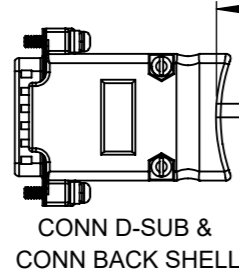
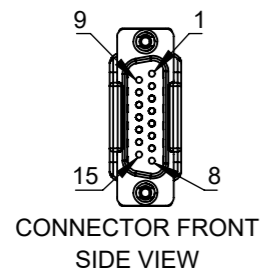


1000.00mm

RELEASE HISTORY			
REL.	CHANGES	DONE BY	DATE
0.1	DRAFT RELEASE	IQ	18 MAY. 2022
0.2	CONN. P11 ADDED, LABEL DETAILS ADDED, P3,P4,P5 PIN OUT UPDATES, NOTE 2.0 UPDATES, NOTE 2.1 UPDATES, TABLE 2.0 UPDATES, TABLE 3.0 UPDATES.	IQ	20 JUL. 2022

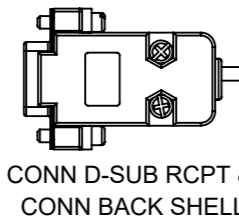
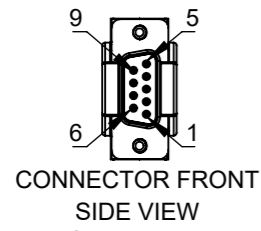
P2



HS-CAN2/CANFD

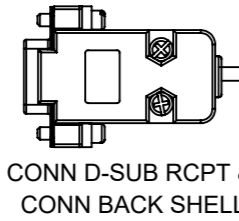
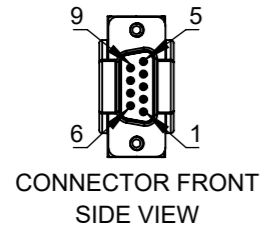
LABEL

P3



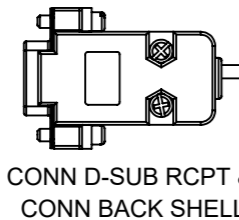
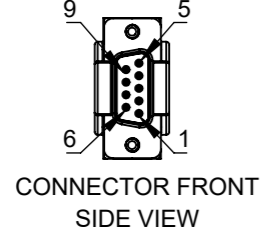
RS485/RS232

P4



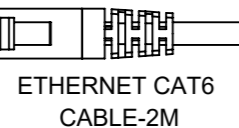
RS232

P5



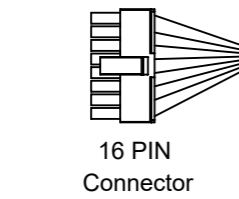
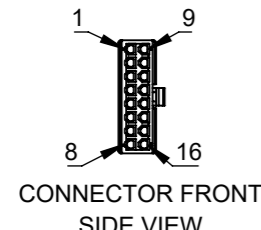
Debug UART

P6



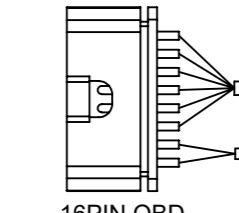
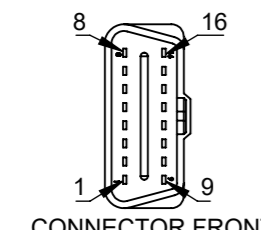
Ethernet

P7



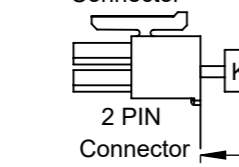
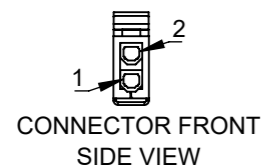
IOs

P8



OBD Connector

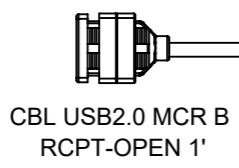
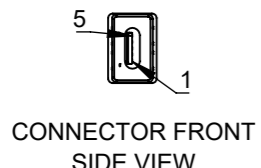
P10



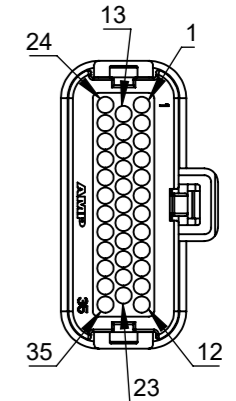
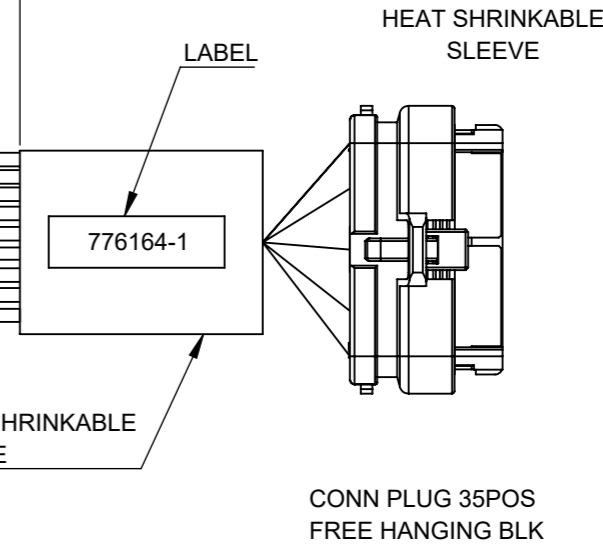
K-LINE/ETH\_ACT

300.00mm P8 TO P10

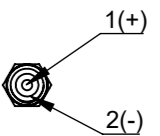
P9



USB



P1



P11

1000.00mm P1 TO P11

NOTES:  
ALL DIMENSIONS ARE IN MM.  
ROUND OFF ALL SHARP EDGES.

SCALE: ----

DRAWN BY	IQ	
CHECKED BY	AJ	
APPROVED BY	KMR	
THIS DRAWING SHEET IS PROPRIETARY OF iWAVE SYSTEMS TECHNOLOGIES Pvt. Ltd.		
RANGE	TOLERANCE	
< 6	A	B
6-30	+0.05	+0.1
30-120	+0.1	+0.2
121-400	+0.15	+0.3
	+0.2	+0.5



**iWave System Technologies Private Limited,**  
7/B, 29th Main, BTM Layout, 2nd Stage,  
Bangalore-560076, India.

DRAWING NO: iW-PRGST-CB-01-R1.0-REL0.2-STD CAB01

MATERIAL :	----	WEIGHT:	----	In grams.
FINISH :	----	SUR AREA:	----	In sqr.mm
TITLE:	Rugged Telematics Device Cable Harness		REV:	1.0
DATE :	20 JUL. 2022		REL:	0.2
			SHEET 1 OF 3	

**Note 2.0: Cable Length (Excluding Connector)**


1. P1 - P2 Cable length – 1000 mm
2. P1 - P3 Cable length – 1000 mm
3. P1 - P4 Cable length – 1000 mm
4. P1 - P5 Cable length – 1000 mm
5. P1 - P6 Cable length – 1000 mm
6. P1 - P7 Cable length – 1000 mm
7. P1 - P8 Cable length – 1000 mm
8. P1 - P9 Cable length – 1000 mm
9. P8 - P10 Cable length – 300 mm
10. P1-P11 Cable length – 1000 mm

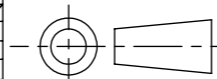
**Note 2.1: Applicable for all cables:**

1. All wires used should be standard wires. Use colour code as specified.
2. All wires should be of UL2517/UL1581 standard and AWG 16-20 wire gauge.
3. All the wires should be consoled with Black PVC meeting UL2517/UL1581 standard.
4. This cable assembly should be RoHS compliant.
5. Dielectric strength 300VDC.
6. Cables should be 100% guaranteed by manufacturer. Datasheet is required for all the cables used in the cable assembly.
7. Wires and connector pins should be non corrosive material.
8. All cables used should be automotive grade, Fire resistant, Low smoke (FRLS)
9. Use crimp 770854-1 to solder wires in to P1 connectors.
10. For all the labels, Heat shrink tube to be used
11. This drawing is generic cable harness for the Rugged Telematics Device. Depending on the configuration of the device, some of the interfaces may not be supported in the cable.

Part	Part Number	Description	Manufacturer	Qty
P1 Connector	776164-1	CONN PLUG 35POS FREE HANGING BLK	TE Connectivity Deutsch Connectors/Equivalent	1
P2 Connector	L717DA15P & 17E-1657-15	CONN D-SUB & CONN BACKSHELL	Amphenol ICC (Commercial Products) /Equivalent	1
P3 Connector	L77SDE09S & 977-009-020R 121	CONN D-SUB RCPT & CONN BACKSHELL	Amphenol ICC & NorComp Inc. /Equivalent	1
P4 Connector	L77SDE09S & 977-009-020R 121	CONN D-SUB RCPT & CONN BACKSHELL	Amphenol ICC & NorComp Inc. /Equivalent	1
P5 Connector	L77SDE09S & 977-009-020R 121	CONN D-SUB RCPT & CONN BACKSHELL	Amphenol ICC & NorComp Inc. /Equivalent	1
P6 Connector	NCB-C6UGRYR1-2	ETHERNET CAT6 CABLE-2M	D-Link/Equivalent	1
P7 Connector	CP3516S0010-NH	16 PIN Connector	Cvilux USA/Equivalent	1
P8 Connector	ST-SOM-002B	16PIN OBD Connector	SETTOLINK/Equivalent	1
P9 Connector	TBD	CBL USB2.0 MCR B RCPT-OPEN 1	TBD	1
P10 Connector	CP3502S0010-NH	2 PIN Connector	Cvilux USA/Equivalent	1
P11 Connector	TBD	DC 5521 Female Connector	TBD	1
P1 Connector Crimp Pin	770854-1	CONN SOCKET 16-20AWG CRIMP TIN	TE Connectivity AMP Connectors/Equivalent	35

Table: 2.0

DRAWN BY	IQ	 <b>iWave</b> Embedding Intelligence	<b>iWave System Technologies Private Limited,</b> 7/B, 29th Main, BTM Layout, 2nd Stage, Bangalore-560076, India.																		
CHECKED BY	AJ																				
APPROVED BY	KMR																				
THIS DRAWING SHEET IS PROPERITORY OF iWAVE SYSTEMS TECHNOLOGIES Pvt. Ltd.		DRAWING NO: iW-PRGST-CB-01-R1.0-REL0.2-STDCAB01	MATERIAL : ----	WEIGHT: ---- In grams.																	
NOTES: ALL DIMENSIONS ARE IN MM. ROUND OFF ALL SHARP EDGES.		FINISH : ----	SUR AREA: ---- In sq.m																		
SCALE: ----		TITLE: Rugged Telematics Device Cable Harness	REV: 1.0	REL: 0.2																	
<table border="1"> <thead> <tr> <th rowspan="2">RANGE</th> <th colspan="2">TOLERANCE</th> </tr> <tr> <th>A</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>&lt; 6</td> <td>+0.05</td> <td>+0.1</td> </tr> <tr> <td>6-30</td> <td>+0.1</td> <td>+0.2</td> </tr> <tr> <td>30-120</td> <td>+0.15</td> <td>+0.3</td> </tr> <tr> <td>121-400</td> <td>+0.2</td> <td>+0.5</td> </tr> </tbody> </table>		RANGE	TOLERANCE		A	B	< 6	+0.05	+0.1	6-30	+0.1	+0.2	30-120	+0.15	+0.3	121-400	+0.2	+0.5	DATE : 20 JUL. 2022	SHEET 2 OF 3	
RANGE	TOLERANCE																				
	A	B																			
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121-400	+0.2	+0.5																			



WIRING CHART


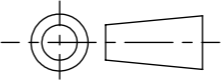
P1 Pin Number	Description	P2 Pin Number DB15 (HS-CAN2 & CAN-FD)	P3 Pin Number DB9 1 (RS485/RS232)	P4 Pin Number DB9 2 (RS232)	P5 Pin Number DB9 3 (Debug UART)	P6 Pin Number RJ45 (ETH)	P7 Pin Number 16Pin Conn (DOUT, DIN, AIN, K-LINE, ETH ACT)	P8 Pin Number OBD Conn (IGN, ETH, HS-CAN1,VCC,GND)	P9 Pin Number USB Conn (USB)	P11 Pin Number DC 5521 FEMALE	Colour Code	Twisted Pair
1	DIN3						3					
2	ANALOG_IN1						8					
3	DIN2 / ETH_ACTIVATE						2					
4	HS_CAN2_H	10										Twisted Pair1
5	HS_CAN2_L	2										Twisted Pair1
6	FD_CAN_H	12										Twisted Pair2
7	FD_CAN_L	4										Twisted Pair2
8	IGN_DET							1				
9	RS485_RX_M		8									Twisted Pair3
10	RS232_RXD1 / RS485_RX_P / UART_RXD		3									Twisted Pair3
11	ETH_MAG_RXP					3		3			Green/White	Twisted Pair4
12	ETH_MAG_RXM					6		11			Green	Twisted Pair4
13	DIN4			2			4					
14	USB_OTG_ID / DOUT3						7		4			
15	DOUT2						6					
16	DOUT1						5					
17	HS_CAN1_H							6			Brown	Twisted Pair5
18	HS_CAN1_L							14			Blue	Twisted Pair5
19	ANALOG_IN2			3			9					
20	RS232_TXD1 / RS485_TX_P / UART_TXD		2									Twisted Pair6
21	RS485_TX_M / K-Line		7				15					Twisted Pair6
22	ETH_MAG_TXP					1		12			Orange/White	Twisted Pair7
23	ETH_MAG_TXM					2		13			Orange	Twisted Pair7
24	MAIN_VCC_OBD_IN							16		1(+)	Red	
25	GND_OBD							5		2(-)	Black	
26	DIN1						1					
27	UART5_TX				3							
28	UART5_RX				2							
29	I2C2_SCL / ETH_ACTIVATE						10					
30	I2C2_SDA / USB_OTG_ID						11					
31	VCC_3V3				1		12					
32	5V_USB								1			
33	USB_OTG_D+_CONN								3			Twisted Pair8
34	USB_OTG_D-_CONN								2			Twisted Pair8
35	USB_GND	6,11,13,14	5	5	5		13		5		Black	

Table: 3.0

P8-OBD Connector Pin Number	Description	P10-2Pin Connector Pin Number
7	KLINE	1
8	ETH_ACTIVATE	2

Table: 3.1

NOTES:  
 ALL DIMENSIONS ARE IN MM.  
 ROUND OFF ALL SHARP EDGES.  
 SCALE: ----

DRAWN BY	IQ	 <b>iWave System Technologies Private Limited,</b> 7/B, 29th Main, BTM Layout, 2nd Stage, Bangalore-560076, India.										
CHECKED BY	AJ											
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THIS DRAWING SHEET IS PROPRIETARY OF iWAVE SYSTEMS TECHNOLOGIES Pvt. Ltd.		DRAWING NO: IW-PRGST-CB-01-R1.0-REL0.2-STDCAB01										
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A	B											
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		REV: 1.0										
		REL: 0.2										
		DATE: 20 JUL. 2022										
		SHEET 3 OF 3										