

# PROD084x SERIES IVU

## *In Vehicle Unit*



Rugged, multipurpose telematics computer.  
Applications include CAS-GPS collision avoidance, vehicle monitoring, fleet management and general remote data logging and management.

### **Features**

- Connectivity: LTE, Wi-Fi, Ethernet, 1x CAN, 2x RS232/485 (software selectable), 1x USB, video input, 2x digital out, 4x digital inputs
- High speed display link (proprietary for use with Wabtec display providing touch screen, audio and microphone)
- Internal and SD card flash storage
- Critical functions battery-backed up for standby operation (optional)
- IP66 ingress protection
- 9-36VDC automotive rated input voltage

### Specifications

<b>Main CPU</b>	ARM 32-bit Cortex™ A8, 800 MHz	
<b>Standby CPU</b>	ARM 32-bit Cortex™ M3	
<b>Memory Card</b>	Micro SD	
<b>RAM</b>	1GB DDR3	
<b>Flash</b>	16GB NAND	
<b>Main interface</b>	Deutsch DRC series 24-pin connector – refer connection table	
<b>Digital Output</b>	2 x Open Drain Solid state relays, 60V Max / 250mA Max	
<b>12V DC Output</b>	1 x 12VDC @ 1.2A Max	
<b>Digital Inputs</b>	2 x single ended inputs (referenced to common power ground), 60Vdc Tolerant/@30mA max, 3Vdc logic threshold 2 x isolated inputs, 60Vdc Tolerant/@30mA max, 3Vdc logic threshold	
<b>USB interface</b>	1 x USB2.OTG port	
<b>Other</b>	2 x RS232/485 software configurable	
<b>Video input</b>	1 x differential composite video (PAL or NTSC)	
<b>LAN interface</b>	1 x 10BASE-T / 100BASE-TX	
<b>RF connectors</b>	Multiple TNC connectors	
<b>V2V Radio</b>	up to 100mW	
<b>GNSS</b>		
<b>Rx Channels</b>	72	
<b>GPS</b>	L1	
<b>GLONASS</b>	L1	
<b>Galileo1</b>	E1	
<b>BeiDou1</b>	B1	
<b>Accuracy (CEP50)</b>	2.5m (Horizontal)	
<b>PVT Update rate</b>	10Hz (2 concurrent constellations)	
<b>WAN</b>	Multi Band LTE Cat 1 with 2G / 3G Fallback for Seamless Global Connectivity	
<b>Bands</b>	LTE Bands: 1, 2, 3, 4, 5, 7, 8, 12(17), 18, 19, 20, 28 3G Bands: 1, 2, 4, 5, 8, 9, 19 2G Bands: Quad Band	
<b>WLAN</b>	IEEE 802.11a/b/g/n Wi-Fi 1W; b/g/n: 2.402GHz ~ 2.4835GHz, up to 19 dBm	
<b>Size</b>	290 wide x 72 high x 130mm deep (basic), Mounting Footprint 215x48mm (suits 4 x M8 SHCS)	
<b>Weight</b>	2kg	
<b>IP Rating</b>	IP66	
<b>Temperature Rating</b>	<b>Standard variant</b>	<b>NB variant</b>
<b>Operating</b>	-15°C to +60°C	-30°C to +60°C
<b>Storage</b>	-20°C to +60°C	-40°C to +60°C
<b>Battery</b>	<b>Standard variant</b>	<b>NB variant</b>
<b>Type</b>	LiFePO <sub>4</sub> , 3.2V, 3200mAh,	Not fitted
<b>Backup time</b>	14hrs standby operation (with V2V active)	N/A
<b>Charge time</b>	7hrs typical	N/A

**Part Number Reference**

Item #	Description
PROD0842-	IVU with WiFi capability
PROD0847-	IVU with WiFi and WAN capability (subject to local certifying authority rules)

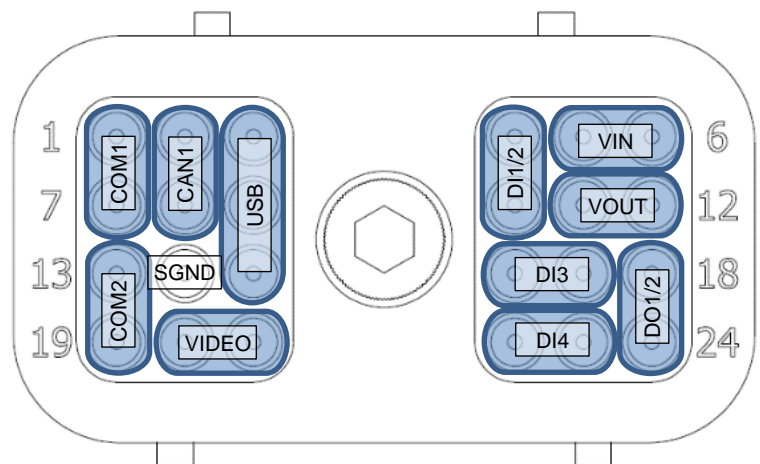
Region Variants (first suffix)	Region 1	Region 2	Region 4	Region 5	Region 7
<b>Countries</b>	RSA Europe Ghana Mozambique	Brazil, USA Canada, PNG Australia Mexico Peru, Chile Colombia	India	Russia	Indonesia
<b>Digital Radio Centre Freq.</b>	869.525 MHz	920 MHz	866MHz	864.5MHz	921/922 MHz
<b>Transmit Power</b>	100mW	100mW	100mW	25mW	100mW

Special Variant (optional suffix)	Description
NB	Battery not fitted

Example Part Numbers	Description
PROD0842-2NB	IVU with WiFi, Region 2, no battery fitted
PROD0847-1	IVU with WiFi and WAN, Region1

**Connections**

Pin	Signal	Function
1	COM1	RS232 Tx / RS485A
7	COM1	RS232 Rx / RS485B
2	CAN1-P	CAN1 High
8	CAN1-N	CAN1 Low
3	USB5V	USB supply out
9	USBD-N	USBD-N
15	USBD-P	USBD-P
4	DIN1	Digital Input 1+
10	DIN2	Digital Input 2+
5	GND Vin	Input Power -ve
6	PWR Vin	Input Power +ve
11	GND Vo	Vout Ground
12	12Vo	Vout +12V
13	COM2	RS232 Tx / RS485A
19	COM2	RS232 Rx / RS485B
14	SGND	Signal Ground
16	DIN3+	Digital Input 3+
17	DIN3-	Digital Input 3-
22	DIN4+	Digital Input 4+
23	DIN4-	Digital Input 4-
18	DOUT1	Digital Output 1+
24	DOUT2	Digital Output 2+
20	VID	Video-
21	VID	Video+



CONNECTIONS TO THE IVU ARE MADE USING DEUTSCH DRC26-24SA

**Contact**

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