COSWORTH

# Removable Logger Unit

## RLU

#### **QUICK LINKS**

- Overview
- Connector Information
- Dimensions

### RLU

#### Overview

The Cosworth RLU is a high bandwidth Ethernet data hub which enables multiple streams of Ethernet data to be logged directly to a standard USB memory stick for instant data offload. Compatible with a range of Cosworth data loggers, ECUs and power controllers, the RLU can record up to 5 separate streams of data.

Configuration is simply a matter of partitioning the USB stick for each separate Ethernet stream using Cosworth Toolset. The configuration of the data stream is defined by the source of the data, so once the USB stick is partitioned, the RLU requires no further configuration.

The RLU contains an integrated 100Mb/s Ethernet switch enabling direct connectivity for up to three Ethernet devices including PC connection for system configuration. This combination allows the RLU to act as a central Ethernet Hub for other on car systems.

Measuring just  $32 \times 70 \times 80$ mm and weighing only 160g the rugged anodised aluminium finish is specifically designed for use in harsh environments where space and weight are important factors.

Electrical Data	
Supply Voltage	6 to 33V
Current Consumption	155mA @ 13.8V
Communication	
Serial Ports	1x Bi-directional RS232 Port Max BAUD Rate: 115200
Ethernet Connections	3 x 100Base-T
USB Ports	1 x USA2 (compatible with USB3)
USB Flash Drive Requirements	USB2 / USB3 min recommended 1GB

#### **Ordering Information**

Description	Part Number
RLU Logger <sup>1</sup>	01L-650030
RLU USB Loom (1m)	60L-650039
RLU Bench Loom	60L-650040

<sup>&</sup>lt;sup>1</sup> USB Flash Drive NOT included

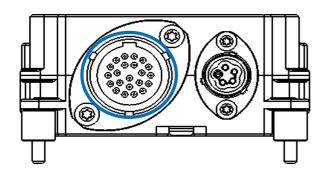


The USB port is broken out onto a separate AS connector, allowing the USB interface to be extended and located in an easy access location to remove the USB stick. Lengths of up to 3m between the RLU box and the USB plug-in point are supported.

Mechanical Data	
Size	32 x 70 x 80mm
Weight	160g
Environmental	IP65, IP67
Operating Temp	-20 to + 70°C
Storage Temp	-30 to +80°C
Material	6082-T6 Aluminium Anodised
Vibration	Cosworth DV-V (C)
LEDs	3 x Diagnostic 3 x Ethernet activity

## **RLU**

#### **Connector Information**

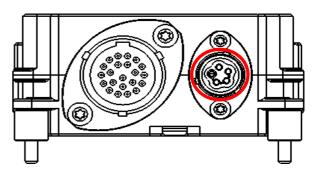


#### **System Connector**

Connector	Mating Connector
AS212-35PN	AS612-35SN

#### **System Connector Pinout**

Pin	Signal	Description
1	RS232Rx	RS232 Debug Rx
2	N/C	Not connected
3	N/C	Not connected
4	Enet1Rx+	Ethernet 1 Rx+
5	Enet1Rx-	Ethernet 1 Rx-
6	Enet1Tx+	Ethernet 1 Tx+
7	+12V	Supply Power +12V
8	Enet2Rx+	Ethernet 2 Rx+
9	Enet2Tx+	Ethernet 2 Tx+
10	N/C	Not connected
11	N/C	Not connected
12	Enet3Rx-	Ethernet 3 Rx-
13	Enet3Tx+	Ethernet 3 Tx+
14	RS232Tx	RS232 Debug Tx
15	N/C	Not connected
16	N/C	Not connected
17	Enet1Tx-	Ethernet 1 Tx-
18	Enet2Rx-	Ethernet 2 Rx-
19	Enet2Tx-	Ethernet 2 Tx-
20	Enet3Rx+	Ethernet 3 Rx+
21	Enet3Tx-	Ethernet 3 Tx-
22	GND	Supply Ground



#### **USB** Connector

Connector	Mating Connector
ASL206-05SN-HE	AS606-05PN-HE

#### **USB Connector Pinout**

Pin	Signal	Description
1	n/c	n/c
2	USB5V	USB +5V
3	USBD+	USB Data +
4	USBD-	USB Data -
5	USB GND	USB Ground
Scn		USB Screen <sup>2</sup>

 $<sup>^{2}</sup>$  Make sure to connect the screen from the USB to the shell of the ASL connector when making interconnect loom.

## **RLU**

#### **Dimensions**

All dimensions shown in mm

