Omega ICD / Lite

Intelligent Colour Display

Applications

- Race
- Rally
- Trackday
- Kitcars

Building on the success of the cost effective, dual colour, backlit Omega D4 LCD display which has proven successful globally across multiple series, Cosworth is excited to add to its product portfolio the new Intelligent Colour Display (ICD). A brand new high performance, configurable, full colour 6.2" TFT display integrating a fully featured Omega data logger and control platform with a powerful dual core 1GHz microprocessor and integrated graphics processor.

Cosworth's Omega platform builds on the power of it's Sigma OS used at the highest levels of motorsport, to bring to market a powerful, full-colour display, logger and control solution all in one enabling users in all series to benefit from usable, advanced logging and control capabilities.

The ICD features super bright, fully configurable tri-colour LED arrays for multi-purpose use as alarms, shift lights, driver aids etc. together with an in-built LDR for auto LED and screen brightness control.

The ICD can be integrated as a central part of the vehicle system. The unit provides flexibility and expansion capabilities through configurable features such as an in-built Ethernet hub, support of 12V or 24V systems, programmable excitations, a LIN port and multiple serial and CAN ports. It also has up to 20 analogue channels, 10 switch inputs and 6 digital inputs.

The Ethernet hub provides improved on car systems connectivity. Devices can be daisy chained and connected to from a single connection point that further simplies loom design.

Cosworth's proven driver aid 'QMode' (Qualifying Mode) is available in mutiple forms to provide specific delta lap time splits to improve lap time performance, consistency in an endurance environment or as a driver training aid. An auto learn feature automatically generates a set number of split points, 'Semi-Auto' allows the user load a .pds dataset and pre-select the fastest lap and 'Manual' allows the user to individually configure sectors within Toolbox analysis software based on a 'hot lap' exported as a 'QMode file'.

The ICD is configured using 'the same Toolset software as the IPS32 power management module, meaning only a single software tool is required for all logging and control configuration. Data is off-loaded to the industry standard Toolbox analysis software used across all current Cosworth logger and control systems.

Features

- On board math channel capabilities
- Configurable display layouts
- 16 high brightness, configurable tri-colour RGB LEDs
- Telemetry support
- Large capacity integrated data logger with max logging rate of 1kHz
- Integrated 100MB/s Ethernet switch for PC Comms and Ethernet expansion
- 2 HSD outputs with PWM control
- 20 analogue inputs (software configurable)
- 16 digital inputs
- 4 CAN ports, 3 serial ports & 1 LIN Bus
- Designed for 12 / 24 Volt systems
- Programmable 5 or 12V Excitations
- LDR auto brightness control
- Black anodized rugged aluminium case
- Offloads into Cosworth's powerful Toolbox Data Analysis Software

Technical Specification

ICD					
	ICD Lite	**ICD**	**Plus Pack**	**Pro Pack**	**Ultra Pack**
Part Number	01D-032954	01D-032953	01P-032953-Plus	01P-032953-Pro	01P-032953-Ultra
LOGGING					
Logging Enabled	-	-	✔	✔	✔
Capacity (MB)	-	-	512	1,024	2,048
Sampling Rate (Hz)	200	200	200	500	1,000
TELEMETRY					
Telemetry Enabled	-	-	-	-	✔
MATHS					
User Configurable 'Box' Maths Channels	20	20	20	50	250
QUALIFYING MODE (QMODE)					
Distance Based – Auto Learn	✔	✔	✔	✔	✔
Distance Based – PDS File Reference	-	-	✔	✔	✔
Distance Based – QM File Generation	-	-	-	✔	✔
SCRUTINEERING					
Scrutineering Logger	-	-	-	-	✔
AUTO BRIGHTNESS					
LDR	✔	✔	✔	✔	✔
I/O					
Analogues	8	8	8	14	20
Digital Inputs	6	6	6	6	6
Switch Inputs	5	5	5	10	10
Outputs	-	-	-	2	2
COMMS					
CAN Ports	2	2	2	4	4
Serial Ports	2	2	2	4	4
LIN Ports	1	1	1	1	1
Ethernet Ports	2	2	2	2	2
Debug	USB	USB	USB	USB	USB
PHYSICAL					
Weight (g)	620	635	635	635	635
Dimensions HxWxD (mm) including connectors	116x190x54	116x190x54	116x190x54	116x190x54	116x190x54
IP Rating	IP65	IP65	IP65	IP65	IP65
SOFTWARE					
Configuration	Toolset	Toolset	Toolset	Toolset	Toolset
Toolbox Analysis	-	-	Lite	Lite	Pro