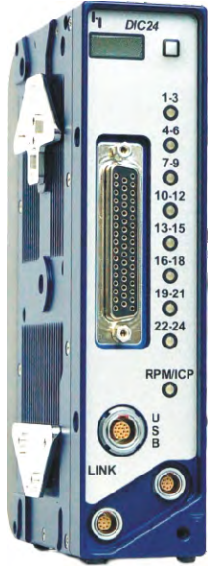


DIC24 (Code 3630)

24-channel ICP® module with D-Sub connector, 50 kS/s per channel



Overview

DIC24 is a 24-channel ICP® / direct voltage module. The D-Sub 50-pin interface can be used for connecting 24 ICP® sensors via cable, which is included in the scope of supply.

The modules can either be used stand-alone via power supply or can be combined into a complex channel system by using a link module.

Features

- 24-channel ICP® module
- 50 kS/s per channel
- Integrated amplifier
- 24 bit A/D converter
- Anti-aliasing filter
- 24th ICP® channel usable as RPM input
- Connection of TEDS sensors

Scope of Supply

- DIC24 (Code 3630)
24-channel ICP® module with D-Sub connector, 50 kS/s per channel
- CLU IV.2 (Code 3673-2)
Connection input module to PC (without link module)
Lemo 17-pin > USB, 2 m
- LBR I.01 (Code 3670-01)
Link cable connecting 2 modules, for compact system
- CDB IV.1 (Code 3671)
50-pin D-Sub > 24-pin BNC (female)

Accessories (optional)

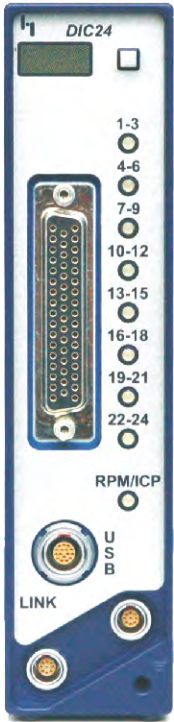
- PWD (Code 3651)
9 - 36 V DC power supply for the DATaRec 4 series
- PWH9 (Code 3652)
12 - 36 V DC power adapter for the DATaRec 4 series

- PWAC (Code 3650)
AC power supply for the DATaRec 4 series, 90 - 130 V, 180 - 260 V
- DSM (code 3690)
Seat Mount for DATaRec 4 systems

Software (optional)

- HEAD Recorder (Code 4630)
Programmable recorder software
- ArtemiS (Code 4600)
Analysis software

50-pin D-Sub > 24 BNC (female)



Display, Toggle button

- Display firmware
- Display input voltage
- Module calibration

Channel LEDs

- Status display: green
- Overload: red

RPM or ICP® channel

USB connection

Single operation (PWD, PWH9 or PWAC required)

Link connections

- Connection to other modules
- Power supply

Technical data DIC24

Number of channels:	24
Sampling frequency (Fs):	350 Hz to 50 kHz, settable in steps of 10 Hz. Each module can work with a dedicated sampling frequency, which is a binary divider of the overall system Fs.
Bandwidth:	0.4 x sampling frequency
Dynamic range:	> 90 dB at 2 V _{peak} range
A/D converter:	24 bit
Data resolution:	16 bit or 32 bit
THD:	< -90 dB at 2 V _{peak} range
Phase accuracy:	< 0.2°
AC accuracy:	± 0.1 % or ± 1 mV
Input impedance:	1 MOhm
Signal level:	± 5 mV _{peak} to ± 5 V _{peak} settable in steps
Coupling:	AC (-3 dB at 0.75 Hz, typ.)
ICP® power:	22 V DC, 4 mA constant current
Connector:	1 x 50-pin D-Sub
Dimensions (W x H x D):	48,1 x 184 x 124,5 mm (1.9" x 7.2" x 4.9") incl. attachment system
Weight (typ.):	1100 g, typ. (2.42 lb)
Cooling:	Conduction cooled
Power consumption:	15 W, typ.
Input voltage range:	17 - 28 V DC
Integrated calibration unit:	1 ppm reference calibration
Galvanic isolation:	Yes
Max. isolation voltage:	Power input 48 V
Input channel voltage safety:	± 35 V
TEDS sensor identification:	IEEE 1451.4 standard for all 24 channels
RPM channel:	Channel 24 can be used as RPM input
RPM sampling frequency:	16 bit mode: 16 x Fs (max. 0.8 MHz) 32 bit mode: 32 x Fs (max. 1.6 MHz)
Threshold level (RPM channel):	0 - 100 % of the selected amplifier step
Mode:	Single ended
Vibration resistance:	5 G (0.011 lb)
Shock resistance:	10 G (0.022 lb)
Temperature operational	
Stand-alone module:	-20° C bis +70° C (-4° F to 158° F)
Link chain system:	-10° C bis +55° C (14° F to 131° F)
Storage:	-40° C bis +85° C (-40° F to 185° F)
Humidity:	0 - 93 % relative, non-condensing