

## Controller - ILC 151 ETH/XC - 2701141

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Inline controller for use under harsh ambient conditions, with Ethernet interface for coupling to other controllers and systems, with programming options according to IEC 61131-3, complete with connector and labeling field.

Similar figure

### Product Description

The ILC 151 ETH/XC modular small-scale controller for the Inline I/O system is at the heart of Easy Automation. The new ILC 1X1 series is characterized by its support for the Modbus/TCP and PROFINET Ethernet-based protocols. A new feature is the support for an optional SD card.

### Your advantages

- ✓ Numerous protocols supported such as: HTTP, FTP, SNMP, SMTP, SQL, MySQL, etc.
- ✓ PROFINET-Device
- ✓ Modbus/TCP-Client
- ✓ Modbus/TCP server
- ✓ HTML 5
- ✓ Free engineering with PC Worx Express (IEC 61131-3)
- ✓ Complete INTERBUS master (4096 I/O points)
- ✓ Integrated web server for visualization with WebVisit
- ✓ FTP server
- ✓ Flash file system



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 712361
GTIN	4046356712361
Weight per Piece (excluding packing)	380.000 g
Custom tariff number	85371091
Country of origin	Germany

# Controller - ILC 151 ETH/XC - 2701141

## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
	Use in potentially explosive areas is not permitted in China.

### Dimensions

Width	80 mm
Height	119.8 mm
Depth	71.5 mm

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-40 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	10 % ... 95 % (according to DIN EN 61131-2)
Permissible humidity (storage/transport)	10 % ... 95 % (according to DIN EN 61131-2)
Air pressure (operation)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Air pressure (storage/transport)	70 kPa ... 106 kPa (up to 3000 m above sea level)
Shock	25g, Criterion 1, according to IEC 60068-2-27
Vibration (operation)	5g

### Control system

Engineering tool	PC WORX
	PC WORX EXPRESS
Programming languages supported	Programming in acc. with IEC 61131-3
Diagnostics tool	DIAG+
Configuration tool	Config+ Version 1.01 or later

### IEC 61131 runtime system

Engineering tool	PC WORX
	PC WORX EXPRESS
Program memory	256 kByte
Mass storage	256 kByte
Retentive mass storage	8 kByte (NVRAM)
Number of control tasks	8
Realtime clock	Yes

### Fieldbus function

Amount of process data	max. 4096 Bit (INTERBUS)
	max. 16384 Bit (internal Modbus /TCP client)
Number of supported devices	max. 128

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## Technical data

### Fieldbus function

Number of local bus devices that can be connected	max. 63 (observe current consumption)
Number of devices with parameter channel	max. 16
Number of supported branch terminals with remote bus branch	max. 3
Program memory	256 kByte

### Data interfaces

Interface	Ethernet 10Base-T/100Base-TX
Number	1
Connection method	RJ45 jack
Transmission speed	10/100 Mbps
Interface	INTERBUS local bus (master)
Number	1
Connection method	Inline data jumper
Transmission speed	500 kBaud / 2 MBaud (can be switched)
Interface	Parameterization/operation/diagnostics
Number	1
Connection method	6-pos. MINI DIN socket (PS/2)
Transmission speed	max. 115.2 kbps

### PROFINET

Device function	PROFINET device
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### Direct I/Os

Input name	Digital inputs
Number of inputs	8
Connection method	Inline potential distributor
Connection technology	2-, 3-, 4-conductor
Description of the input	EN 61131-2 type 1 NPN/PNP
Output name	Digital outputs
Number of outputs	4
Connection method	Spring-cage connection
Connection technology	2-, 3-, 4-conductor
Maximum output current per channel	500 mA

### Power supply

Typical current consumption	210 mA
Max. current consumption	870 mA (370 mA communications power + 500 mA analog voltage supply)
Supply voltage	24 V DC
Supply voltage range	19.2 V DC ... 30 V DC

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### Power supply

Residual ripple	± 5 %
Power dissipation	max. 5 W

### Mechanical design

Weight	285 g
Diagnostics display	No
Controller redundancy	No
Safety function	No

### General data

Processor	Altera Nios II 64 MHz
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### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Interference emission	Noise emission test as per EN 61000-6-4 EN 55011 Class A
Immunity to surge	Noise immunity test in accordance with EN 61000-6-2 Transient overvoltage (surge) EN 61000-4-5/IEC 61000-4-5 Criterion B, supply lines DC: 0.5 kV/0.5 kV (symmetrical/asymmetrical), fieldbus cable shield 1 kV
Immunity to burst	Noise immunity test in accordance with EN 61000-6-2 Fast transients (burst) EN 61000-4-4/IEC 61000-4-4 Criterion A, all interfaces 1 kV Criterion B, all interfaces 2 kV
Immunity to EF	Noise immunity test in accordance with EN 61000-6-2 Electromagnetic fields EN 61000-4-3/IEC 61000-4-3 Criterion A, Field intensity: 10 V/m
Immunity to ESD	Noise immunity test in accordance with EN 61000-6-2 Electrostatic discharge (ESD) EN 61000-4-2/IEC 61000-4-2 Criterion B, 6 kV contact discharge, 8 kV air discharge
Immunity to conducted interference	Noise immunity test in accordance with EN 61000-6-2 Conducted interference EN 61000-4-6/IEC 61000-4-6 Criterion A, Test voltage 10 V
Vibration (storage/transport)	5g
Shock	25g, Criterion 1, according to IEC 60068-2-27
Vibration (operation)	5g

### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Classifications

eCl@ss

eCl@ss 10.0.1	27242207
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## Classifications

### eCl@ss

eCl@ss 11.0	27242207
eCl@ss 4.0	27240400
eCl@ss 4.1	27240400
eCl@ss 5.0	27242700
eCl@ss 5.1	27242700
eCl@ss 6.0	27242200
eCl@ss 7.0	27242207
eCl@ss 9.0	27242207

### ETIM

ETIM 3.0	EC001423
ETIM 4.0	EC001596
ETIM 6.0	EC000236
ETIM 7.0	EC000236

### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172018
UNSPSC 12.01	43201404
UNSPSC 13.2	39122114
UNSPSC 18.0	39122114
UNSPSC 19.0	39122114
UNSPSC 20.0	39122114
UNSPSC 21.0	39122114

## Approvals

### Approvals

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Approvals

DNV GL / BV / LR / ABS / BSH / RINA / EAC / cULus Listed

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Ex Approvals







UL Listed / cUL Listed / ATEX / cULus Listed

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### Approval details

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## Approvals

DNV GL		<a href="https://approvalfinder.dnvgl.com/">https://approvalfinder.dnvgl.com/</a>	TAA00002CU
BV		<a href="http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials">http://www.veristar.com/portal/veristarinfo/generalinfo/approved/approvedProducts/equipmentAndMaterials</a>	20989_C0 BV
LR		<a href="http://www.lr.org/en">http://www.lr.org/en</a>	08/20033
ABS		<a href="http://www.eagle.org/eagleExternalPortalWEB/">http://www.eagle.org/eagleExternalPortalWEB/</a>	17-HG1621871-PDA
BSH			858
RINA		<a href="http://www.rina.org/en">http://www.rina.org/en</a>	ELE001320XG
EAC			RU *- DE.A*30.B.00238
cULus Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 238705