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# Product Catalog



## DLG, a company in tune with market needs

Following the worldwide race to find new sources of alternative energy, renewable and environmentally friendly, DLG is a company specializing in products and services for industrial automation, systems integration, project and electrical assemblies.

Installed in Sertãozinho / SP, one of the largest sugar and alcohol centers in the world, since 1997 DLG works with a commitment to develop new equipment and control systems that provide greater efficiency and reliability in industrial processes of different segments.

### Certifications

Implement a system of quality management is vital for business and good performance of organizations seeking greater efficiency and competitiveness in the areas of their interest.

ISO 9001 is a tool used to standardize the processes and organization structures aiming at full compliance with the requirements of the customer and therefore your satisfaction, converging to continuous improvement and quality of the products and services provided by promoting the reliability and credibility of the organization in the market.

And thinking about it, that DLG earned this certification because investing in quality is to invest in the future.

Another important achievement that testifies to the pursuit of continuous growth by DLG was adherence to seal CEISE Br Qualifica, which enables the company to quality management, occupational health and safety, based on ISO 9001 and OHSAS 18001.



## Experience and agility in maintenance and technical assistance

Being always ready to attend quickly and ensure the quality of services are items that always been part of attendance policy of DLG.

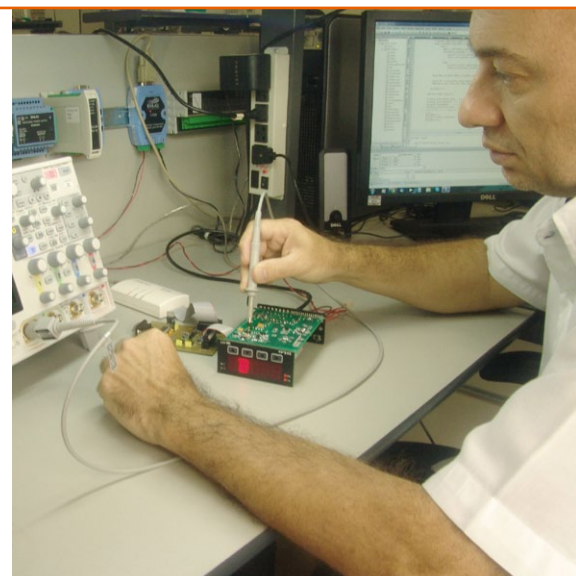
Its great differential is owning a specific department for preventive maintenance, corrective, industrial and technical assistance 24 hours during the whole year.

The services are performed by a team of experienced professionals, in laboratories suitable for equipments of its product line and other manufacturers, as:

- Sensors
- Indicators
- Converters
- Transmitters Brix

### 24 hours processing intelligent solutions

Being a DLG customer means having true partners who work 24 hours for your production do not stop. Our highly skilled technicians are available to find appropriate solutions, avoiding turbulence and stops deprogrammed.



## Equipments PROFIBUS DP

### HDP - 210

#### Hub Profibus DP

The Profibus DP HUB HDP-210 enables the expansion and consequently RS-485 signal regeneration, amplifying data signals and coupling Profibus DP segments branched form. Its main applications are isolating channels with noise and segment the Profibus bus, allowing better layout of network structure.



#### Features:

- 5 channels galvanically isolated from the master
- Increase data signal
- anti-glitch filter for signal transmission
- 32 devices per segment
- Supports Profibus DP and FMS
- No need of addressing
- LEDs for communication status
- Compact and low profile
- DB9 connector and terminals for communication

**Communication:** Profibus DP, DP-V1, DP-V2, PROFdrive, MPI

**Auto Baud Rate:** 9.6k, 19.2k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M and 12M

**Consumption:** 6VA

**Power Supply:** 20.4 ~ 28.8 Vdc

**Construction:** Aluminium and side covers PA 6.6-FR (Flame Resistant Polyamide)

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-50

**Dimensions:** 42.1 x 212 x 105.4 mm



### XM - 210 DP

#### Profibus DP Universal Remote

The Profibus Universal Remote XM-210 DP was created to promote versatility and robustness in industrial plants. With its processing core based on ARM © technology, the XM-210 DP offers speed and affordability to the field variables through the Profibus DP protocol, allowing reading in its 16 inputs.

#### Inputs:

16 Universal Inputs:

- Current: 0 ~ 20mA and 4 ~ 20mA
- Voltage: 0 ~ 75mV, 0 ~ 5V, 0 ~ 10V
- Logical level: 0 ~ 12V
- Thermocouples: B, E, J, K, N, R, S, T.
- RTD type PT-100 (2 or 3 wire)
- Frequency: Up to 4 simultaneous channels with 10kHz

- 2 Isolated Digital Inputs

#### Outputs:

- 2 Alarms to Relay: SPDTMax. 3A/220Vac

#### Communication:

- 1 RS-485 communication port with isolation and 2 accesses.; Connector DB9 and one by post

- Protocol: Profibus DPV0

**Baud Rate:** 9.6k, 19.2k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M and 12M

**Configuration:** Through GSD file

**Consumption:** 10VA

**Power Supply:** Full range (90 ~ 240Vac) or 24Vdc

**Construction:** Aluminium side covers and PA 6.6-FR (Flame Resistant Polyamide)

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-50

**Dimensions:** 59 x 208 x 75mm

### LMP-100

#### Profibus DP Gateway - Modbus RTU

The LMP-100 Gateway is used to integrate Profibus DP and Modbus networks simply and reliably.



#### Modbus:

- RTU Transmission mode
- Period scanning of configurable variables to 60 seconds
- Response Timeout configurable up to 60 seconds
- Number of retransmission attempts configurable
- Setting up 38 rules for monitoring

#### Profibus:

- Automatic detection of baud rate
- Diagnostics
- Isolation between output and Profibus equipment: 500VAC

**Communication:** Profibus DPV0

**Auto Baud Rate:** 9.6k, 19.2k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M and 12M

**Configuration:** Through GSD file

**Consumption:** 2VA

**Power Supply:** 20.4 ~ 28.8 Vdc

**Construction:** Polycarbonate and ABS plastic flame resistant

**Mounting:** 35mm DIN Rail

**Degree of protection:** IP-30

**Dimensions:** 101 x 22.5 x 120mm

## HDP - 200

### Profibus DP Repeater

The Profibus HDP-200 Repeater allows for expansion, and hence the RS-485 signal regeneration, amplifying and coupling data signals Profibus DP network segments.



#### Features:

- Channel isolated
- Increase data signal
- anti-glitch filter the data signal
- 32 devices per segment
- Maximum cable length 1200m (9600bps)
- No need addressing
- Cable: Type A ac. EN50170
- LEDs for communication status
- DB9 connector and terminals for communication

**Communication:** Profibus DP, DP-V1, DP-V2, PRO-Drive, MPI

**Auto Baud Rate:** 9.6k, 19.2k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M and 12M

**Consumption:** 4VA

**Power Supply:** 20.4 ~ 28.8 Vdc

**Construction:** Aluminium and side covers PA 6.6-FR (Flame Resistant Polyamide)

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-50

**Dimensions:** 75.4 x 104 x 58.5 mm

## TDP-100

### Profibus DP Active Terminator

The Profibus DP Terminator TDP-100 is an active terminator that was created to enable the manipulation of any node of the communication bus in full operation. Thus, extreme nodes or intermediate bus can be disconnected, removed or replaced without compromising data transfer from other nodes, where the terminating resistors must remain constantly connected.



#### Features:

- Galvanic isolation
- Cable: Type A ac. EN50170
- LED Power Supply status and Bus
- 1 DB9 front Profibus DP
- 1 connector for Profibus DP terminal

**Communication:** Profibus DP, DP-V1, DP-V2, PROFdrive, MPI

**Auto Baud Rate:** 9.6k, 19.2k, 45.45k, 93.75k, 187.5k, 500k, 1.5M, 3M, 6M and 12M

**Consumption:** 0.6 VA

**Power Supply:** 20.4 ~ 28.8 Vdc

**Construction:** ABS plastic

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-20

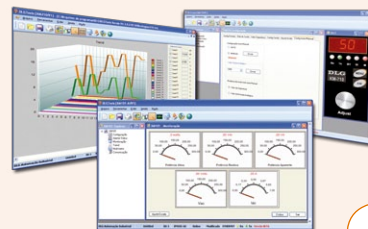
**Dimensions:** 94 x 27 x 77.5mm

## Equipment configurable through DLG Tools

The DLG Tools is a software application configuration and data acquisition system designed specifically for Windows ® platform. With this tool, the user can configure multiple DLG devices through Modbus and also get historical data (TREND) through a very friendly graphical interface.

The DLG Tools was designed to be a fast tool, friendly and easy access to information, making it a versatile application in field instrumentation.

The DLG Automation Industrial Ltda. provides free software for downloading through the Site [WWW.DLG.COM.BR](http://WWW.DLG.COM.BR)



## XM-210 ETH

### Universal Ethernet Remote

The Universal Ethernet Remote ETH XM-210 was created to promote versatility and robustness in industrial plants. With its processing core based on ARM ® technology, the XM-210 ETH offers speed and affordability to the field variables, thus enabling the reading in its 16 inputs.

#### Inputs:

- 16 universal inputs:
  - thermocouples J, K, T, R, S, E, N, B cold junction compensation
  - RTD type PT-100 (2 or 3 wire)
  - Current: 0 ~ 20 mA and 4 ~ 20 mA
  - Voltage: 0 ~ 75 mV, 0 ~ 5V, 0 ~ 10V
  - Logical level: 0 ~ 12 V
  - Frequency: 10 kHz up to 4 simultaneous channels
  - 2 isolated digital inputs

#### Outputs:

- 2 relay outputs for alarm status

**Communication:** Modbus TCP, web service, SNMP, Modbus RTU (RS-485). Integrated Ethernet switch, topology enabling "daisy chain".

**Consumption:** 4.4 VA

**Power Supply:** Full Range (90 ~ 240 Vac)

**Construction:** Aluminium side covers and PA 6.6-FR (Flame Resistant Polyamide)

**Mounting:** DIN Rail 35mm on interior panels

**Degree of Protection:** IP-50

**Dimension:** 59 x 208 x 75mm



## LME-200 / LME-210

### Ethernet Gateway Modbus RTU - 1 Channel or 4 Channels



The equipments LME-200 and LME-210 are modern and efficient gateways that promote data communication between Ethernet and Modbus RTU digital networks.

#### Ethernet Network:

- Protocols: Modbus TCP,
- 1 Ethernet port 10/100 Mbps, according to IEEE 802.3
- Isolation: 1500V
- Number of ports: up to 7 simultaneous

#### Serial Ports:

- LME-200 (1 RS-485 port)
- LME-210 (3 RS-485 ports, 1 RS-232 port)
- Interface: RS-485 half-duplex, multidrop

- Protocol: Modbus / RTU
  - Isolation: 4000V and surge protection
- Baud Rate:** 9.6k, 19.2k, 38.4k, 57.6K and 115.2K  
**Consumption:** 1.5 VA  
**Power Supply:** 10 ~ 30Vdc  
**Construction:** Aluminium side covers and PA 6.6-FR (Flame Resistant Polyamide)  
**Mounting:** 35mm DIN Rail  
**Degree of Protection:** IP-50  
**Dimensions:** 59 x 103 x 75mm



## DL-200

### Data Logger



The equipment DL-200 is a modern and efficient data logger and its main feature is to be a master Modbus RTU, i.e., it acquires data through serial and generates a report in a format compatible with Windows.

#### Ethernet Network:

- Protocols: Modbus TCP
- 1 Ethernet port 10/100 Mbps, IEEE 802.3 standard
- Isolation: 1500V
- Number of ports: up to 7 simultaneous

#### Serial Port:

- Number of ports: 1
- Interface: RS-485 half-duplex, multidrop
- Protocol: Modbus RTU
- Isolation: 4000V and surge protection

- Baud Rate:** 9.6k, 19.2k, 38.4k, 57.6K and 115.2K  
**Memory Card:**
- **Type:** MicroSD.
  - **Capacity:** 2GB max.
- Consumption:** 1.5 VA  
**Power Supply:** 10 ~ 30Vdc  
**Construction:** Aluminium side covers and PA 6.6-FR (flame resistant Polyamide)  
**Mounting:** 35mm DIN Rail  
**Degree of Protection:** IP-50  
**Dimensions:** 59 x 103 x 75mm



## KM-710

### Auto-manual Station (Backup)



Equipment for the transfer of "set-point" without disturbing the output. Adjustment value through encoder.

#### Inputs:

- Configurable Analog Input 1: 0 ~ 10, 0 ~ 5, 1 ~ 5Vdc, 0 ~ 4 ~ 20mA and 20mA
- 1 configurable digital input: NPN, PNP, inverted NPN and inverted PNP

#### Outputs:

- 1 analog output configurable: 0 ~ 10Vdc, 0 ~ 5Vdc, 1 ~ 5VDC, 0 ~ 20mA, 4 ~ 20mA and 4mA ~ 20 mA
- 1 configurable relay output: N.O., N.C.

- Communication:** RS485, Modbus RTU  
**Baud Rate:** 9.6k, 19.2k, 38.4k, 57.6K and 115.2K  
**Consumption:** 2VA  
**Power Supply:** Full range (90 ~ 240Vac)  
**Construction:** ABS plastic  
**Mounting:** Front panel  
**Degree of Protection:** IP-63 Front / Rear IP-20  
**Dimensions:** 48 x 96 x 148mm



## XM-210

### Universal Modbus Remote



The Universal Modbus Remote XM-210 was created to promote versatility and robustness in industrial plants. With its processing core based on ARM ® technology, the XM-210 offers speed and accessibility to the field variables, thus enabling the reading in its 16 inputs.

#### Inputs:

- 16 configurable analog inputs
- Thermocouple type J, K, T, R, S, E, N, B with cold junction compensation
- RTD type PT-100 (2 or 3 wire)
- Current: 0 ~ 20mA and 4 ~ 20mA
- Voltage: 0 ~ 75mV, 0 ~ 5V and 0 ~ 10V
- Logic level: 0 ~ 12V
- Frequency: 10kHz up to 4 simultaneous channels
- 2 isolated digital inputs

#### Outputs:

- 2 relay outputs for alarm status
- Auxiliary Power Supply 24Vdc x 150mA

**Communication:** RS-485, Modbus RTU

**Baud Rate:** 9.6k, 19.2k, 38.4k, 57.6K and 115.2K

**Consumption:** 4.4 VA

**Power Supply:** Full range (90 ~ 240Vac) or 24Vdc

**Construction:** Aluminium side covers and PA 6.6-FR (Polyamide flame resistant)

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-50

**Dimensions:** 59 x 208 x 75mm



## I-210

### Universal Indicator



Caixa Metálica

The I-210 is a Modbus Universal Indicator that makes reading standard magnitudes. Indication of process variable can be read in front of the I-210 through the five 7-segment display for easier viewing and configuration. The I-210 has a serial communication port and can be connected to a Modbus RTU, ideal for systems acquisition and supervision. Built in Aluminium, is robust and immune to noise.

#### Inputs:

- 1 configurable analog input:
  - Thermocouple type J, K, T, R, S, E, N, B (ITS-90) with cold junction compensation
  - RTD type PT-100 (2 or 3 wire)
  - Current: 0 ~ 20 mA and 4 ~ 20 mA
  - Voltage: 0 ~ 75 mV, 0 ~ 5V, 0 ~ 10V
  - Frequency 0.4 Hz to 30 kHz with a sensitivity of 0.3 V ~ 50 V
  - Logic Level
- 2 digital inputs

#### Outputs:

- 2 SPDT relay outputs
  - retransmission (PV) in 0/4 ~ 20mA or 0/2 ~ 10Vdc
  - Alarms Lo, Hi, differential and differential inverted value
- Input

- Filter protection against electromagnetic noise in the Power Supply
- Detachable rear connection

**Communication:** RS-485, Modbus RTU

**Baud Rate:** 9.6k, 19.2k, 38.4k, 57.6K and 115.2K

**Consumption:** 5 VA

**Power Supply:** Full Range (90 ~ 240 Vac)

**Construction:** Aluminium and ABS plastic front

**Mounting:** Front Panel

**Degree of Protection:** IP-63 frontal side and IP-20 rear side

**Dimension:** 48 x 96 x 144 mm



## SD-3000

### Microprocessed Brix Transmitter



Radio frequency transmitter for measuring the Brix of sugar in vacuum pan for mass (molasses) (mass (molasses) A, B or C), honey and liquors. Two tables with 50 points each for linearization.

#### Inputs:

- 1 current input (0 ~ 20mA)

#### Outputs:

- 2 current outputs (0/4 ~ 20mA) for the transmission of the linearized signal
- 2 relay outputs for alarms solid state (N.O.)

**Communication:** Through RS-485, Modbus / RTU with 2 independent ports

**Baud Rate:** 9.6k, 19.2k, 38.4k, 57.6K and 115.2K

**Consumption:** 7.2 VA

**Power Supply:** 24Vdc

**Construction:** Aluminium and stainless steel rod AISI-316

**Mounting:** Flange Tri-clamp

**Degree of Protection:** IP-65

**Dimensions:** 160mm x 290mm x 91mm + bar

**Bar sizes:** L1 = 115mm, L2 = 165mm,

L3 = 320mm and special



## XM-102 / XM-112

### Universal ModBus Converter - 1 or 2 analog outputs

The converters XM-102 and XM-112, have been developed to promote the versatility and robustness of the plants which are used to interface between various types of sensor signals, with devices / systems using the Modbus / RTU.



#### Inputs:

- Thermocouple Type: J, K, T, R, S, E, N, B with cold junction compensation
- RTD type PT-100 (2 or 3 wires)
- Current: 0/4 ~ 20mA
- DC Voltage: 0 ~ 100mV, 0 ~ 5V, 0 ~ 10V
- Frequency: 0.4Hz ~ 30KHz

#### Output:

##### XM-102

- 1 analog output relay 0 ~ 20/4 ~ 20mA or 0 ~ 10/2 ~ 10Vdc
- 1 relay SPDT 250Vac 3Amp

##### XM-112

- 2 analog outputs Relay 0 ~ 20/4 ~ 20mA or 0 ~ 10/2 ~ 10Vdc
- 1 relay SPDT 250Vac 3Amp

#### Auxiliary Power Supply: 24Vdc 50mA x

linearization

- Linearization of input voltage and current with up to 20 points

**Alarm:** Configurable Hi, Lo and Differential with Hysteresis

**Communication:** RS-485, Modbus RTU

**Baud Rate:** 9.6k, 19.2k, 38.4k, 57.6K and 115.2K

**Consumption:** 5 VA

**Power Supply:** Full range (85 ~ 260Vac)

**Construction:** ABS plastic

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-30

**Dimensions:** 23 x 102 x 120mm



## IM-111

### Universal Indicator



The IM-111 is a Modbus Universal Indicator that makes reading standard magnitudes. Indication of process variable can be read in front of the IM 111 through 5 displays of 7-segment for easier viewing and configuration. The IM-111 has a serial communication port and can be connected to a Modbus RTU, ideal for systems acquisition and supervision, is robust and immune to noise.

#### Inputs:

1 configurable analog input:

- Thermocouple type J, K, T, R, S, E, N, B (ITS-90) with cold junction compensation
  - RTD type PT-100 (2 or 3 wire)
  - Current: 0 ~ 20 mA and 4 ~ 20 mA
  - Voltage: 0 ~ 75 mV, 0 ~ 5V, 0 ~ 10V
  - Frequency 30 kHz to 0.4 Hz with a sensitivity of 0.3 V ~ 50 V
  - Logic Level
- 2 digital inputs

#### Output:

2 SPDT relay outputs

- retransmission (PV) 0/4 ~ 20mA or 0/2 ~ 10Vdc
- Alarms Lo, Hi, differential and differential inverted input value

- Filter protection against electromagnetic noise in the Power Supply
- Detachable rear connection

**Communication:** RS-485, Modbus RTU

**Baud Rate:** 9.6K, 19.2K, 38.4K, 57.6K and 115.2K

**Consumption:** 5 VA

**Power Supply:** Full Range (90 ~ 240 Vac)

**Construction:** ABS plastic

**Mounting:** Front Panel

**Degree of Protection:** IP-63 Front side and IP-20 Rear side

**Dimension:** 48 x 96 x 144 mm



## PSM-750A

### Positioner



The PSM-750A is a Positioner used to control rotation of the steam turbine. Positions the actuators (servo) by "step" control without the need for feedback from its position, eliminating TEP (EPT) (electronic position transmitter) and potentiometer. It has several functions, such as over speed protection ("trip"), under speed time attraction regulator, etc..

#### Inputs:

- 1 PV current 0 ~ 20Vdc, 4 ~ 20Vdc, 0 ~ 10Vdc or pick-up or tachogenerator (tachometer generator) frequency 0 ~ 30 kHz (specify)
- 2 Current Set Point 0 ~ 20mA, 4 ~ 20mA or 0 ~ 10Vdc voltage

#### Output:

- 2 relay outputs for SPST (N.O.) to increase and decrease speed
- 2 SPDT output relay (for alarm)
- 1 Relay PV Output - current 0 ~ 20mA, 4 ~ 20mA, 0 ~

10Vdc voltage or

**Communication:** RS-232, Modbus RTU

**Baud Rate:** 9.6k, 19.2k, 38.4k, 57.6K and 115.2K

**Consumption:** 4.2 VA

**Power Supply:** 127/220Vac or 24Vdc (specify)

**Construction:** ABS plastic

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-30

**Dimensions:** 100 x 75 x 105mm







## DM-310

### Multipoint indicator

DM-310 is a multipoint indicator with 10 or 16 analog inputs configurable through the frontal side or through the DLG Tools.

#### Inputs:

- 10 or 16 configurable analog inputs
  - thermocouples J, K, T, R, S, E, N, B (ITS-90) with cold junction compensation
  - RTD type PT-100 (2 or 3 wire)
  - Voltage: 0 ~ 75mV, 0 ~ 5V and 0 ~ 10Vdc
  - Current: 0 ~ 20mA and 4 ~ 20mA

2 isolated digital inputs for alarm acknowledgment and status

#### Output:

2 relay outputs

**Communication:** through RS-485, ModBus / RTU

**Baud Rate:** 9.6k, 19.2k, 38.4k, 57.6K and 115.2K

**Consumption:** 4.4 VA

**Power Supply:** Full range (90 ~ 240Vac)

**Construction:** ABS plastic

**Mounting:** Front panel

**Degree of Protection:** IP-63 Front and IP-30 Rear

**Dimensions:** 98 x 98 x 135mm



## XM-101

### Modbus Universal Converter

The Universal Converter with 1 Modbus channel XM-101 was created to promote versatility and robustness in industrial plants and is used to interface between sensors and signals of various types with equipment with Modbus RTU, allowing, through its universal channel, the reading of various kinds of signals. This equipment also has a measuring channel high voltage and current, where it is possible to read from the mains and consumption of certain circuits through the active Power Supply, reactive and apparent.

#### Inputs:

- 1 Universal input configurable
  - Thermocouple type J, K, T, R, S, E, N, B (ITS-90) with cold junction compensation.
  - RTD type PT-100 (2 or 3 wire)
  - Current 0 ~ 20mA, 4 ~ 20mA and 0 ~ 5A
  - Voltage 0 ~ 75mV, 0 ~ 5V and 0 ~ 10V, 0 ~ 0 ~ 250V and 250Vac
  - Logic level maximum amplitude 10Vdc
  - Frequency to 30kHz with a sensitivity of 0.3 V to 50V
  - Active, reactive and apparent dependent PTs and CTs
- 1 Isolated digital input up to 30V for alarm and status
- 2 configurable alarm levels Hi, Lo and Differential with hysteresis and delay of 1 ~ 10 seconds

#### Output:

- 2 analog outputs: 0/4 ~ 20mA or 0/2 ~ 10V
- 1 output relay with SPDT N.O.
- Auxiliary Power Supply 24Vdc x 30mA

**Communication:** RS-485, Modbus RTU

**Baud Rate:** 9.6k, 19.2k, 38.4k, 57.6K and 115.2K

**Consumption:** 5VA

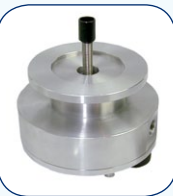
**Power Supply:** Full range (90 ~ 240Vac) or 24Vdc

**Construction:** Polyamide flame resistant

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-63

**Dimensions:** 113 x 105 x 23mm



## MX-100

### Pick-up Adapter (Cog-wheel or gear-wheel)

System to adapt magnetic and inductive pick-up sensor with plastic and cog-wheel coupling of 60, 30 and 6 teeth. Sensors not included.

**Construction:** In Aluminium

**Dimensions:** 140 x 127.5 mm



## RS-210

### Motion Detector Relay ("Zero-Speed")

Motion Detector Relay with input sensors and output changeover contact. Configured by the user, can act as a null or over speed motion detector. Ideal for protection against coupling breakage of conveyor belts. It features automatic adjustment of the rotation operation, filter time, Triac and dead zone.

#### Inputs:

- 1 Sensor NPN, PNP, tachogenerator or Pick-Up.
- Maximum frequency 30kHz

#### Output:

1 Output at 250Vac x 3A SPDT

**Consumption:** 4.8 VA

**Power Supply:** 127/220Vac

**Construction:** ABS plastic

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-30

**Dimensions:** 45 x 75 x 105mm



## XS-110

### Converter / Adder Signal

Converter / Adder Signal, digital inputs (configurable) and standardized output signal of 0 ~ 20, 4 ~ 20mA or 0 ~ 10Vdc proportional to the digital inputs activated optic-isolated.

**Inputs:**

10 Digital, 24Vdc, NPN or PNP

**Output:**

1 Analog: 4 ~ 20mA or 0 ~ 10Vdc

**Consumption:** 17VA

**Power Supply:** Full range (90 ~ 240Vac)

**Construction:** ABS plastic

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-30

**Dimensions:** 100 x 75 x 105mm



### SVM-300/D

#### Actuator for Dedini Turbine

Electromechanical actuator for remote variation of speed steam Dedini turbines - Operation based on three-phase motor 1/3 HP. It has steering wheel for manual operation and limit switches of course.

**Control:** ON / OFF Reversible

(Working in conjunction with PSM-750/D or PSM-750A)

**Consumption:** 36VA

**Power Supply:** 220/380/440Vac

**Construction:** Carbon steel with epoxy paint

**Fixing:** Screwed in place of the original steering wheel control

**Degree of Protection:** IP-54



### SVM-300/Z

#### Actuator for Zanini turbine

Electromechanical actuator for remote variation of speed steam Zanini turbines (AKZ). Operation based on the DC motor. It has steering wheel for manual operation and limit switches of course.

**Control:** ON / OFF Reversible

(Working in conjunction with PSM-750/D or PSM-750A)

**Consumption:** 36VA

**Power Supply:** 12Vdc

**Construction:** Carbon steel with epoxy paint

**Fixing:** Screwed in place of the original steering wheel control

**Degree of Protection:** IP-54



### SC-100

#### Capacitive Sensor

Capacitive sensor with adjustable sensitivity, developed for detecting level of chute-donelly.

**Output:**

1 NPN and PNP output

**Consumption:** 0.7 VA

**Power Supply:** 12 ~ 30Vdc

**Construction:** Polyamide PA6

**Degree of Protection:** IP-65

**Mounting:** Installation bored acrylic, so that it is in contact with the material or directly without acrylic (without hole)

**Dimensions:** 129 x 84mm



### SC-500

#### Capacitive Sensor

Sensor Capacitivo con ajuste de sensibilidad, desarrollado para detección de nivel de chute-donelly.

**Output:**

1 NPN and PNP output

**Consumption:** 0.7 VA

**Power Supply:** 12 ~ 30Vdc

**Construction:** Polyamide PA6

**Degree of Protection:** IP-65

**Mounting:** Installation acrylic non-bored (external)

**Dimensions:** 127 x 37mm



## B-200

### Universal calibrator

Universal Portable calibrator generates and measures standardized signs. With rechargeable battery and internal source for Power Supply two-wire transmitters.

#### Configurable input:

- Voltage: -40 ~ 40Vdc
- Current: 0 ~ 30mA
- RTD type PT-100 (2 or 3 wire)
- Thermocouple: J, K, T, R, S, E, N, B

#### Configurable output:

- Voltage: 12Vdc ~ -1Vdc
- Current: 0 ~ 25mA

- RTD type PT-100 (2 or 3 wire)
- Thermocouple: J, K, T, R, S, E, N, B
- Power Supply sensor 2-wire (0 ~ 25mA)

**Consumption:** 3.3 VA

**Power Supply:** Accompany external charger Full range (90 ~ 240Vac)

**Construction:** ABS plastic

**Degree of Protection:** IP-50



## G-400

### Signal Simulator

The analog signal simulator G-400 of DLG is a high-performance equipment, intended for testing and measuring equipment, sensors and transmitters in the field.

Robust and resistant to the invasion of dust and liquids, the G-400 has great mobility, because its reduced dimensions facilitating and speeding up the routine diagnosis and correction.

The G-400 is the ideal solution for those looking for practicality, functionality and accuracy in a simulation tool for analog signals.

#### Inputs:

- Voltage: 0 ~ 30Vdc, 100mVdc resolution
- Current: 0 ~ 25mAdc, 100 $\mu$ Adc resolution

#### Output:

- Voltage: 0 ~ 18Vdc, resolution 100mVdc
- Current: mA mode and XTR (with internal source of 24Vdc) 0 ~ 25mAdc, resolution 100 $\mu$ Adc
- Generation of ramp any type of output, configurable time and amplitude
- Step function, in percentage, to increase output
- 5 memory locations pre-defined and configurable for each engineering output
- Display: TFT colored display and membrane keypad for easy navigation and viewing

**Power Supply:** AA batteries, external charger accompanies Full range (90 ~ 240Vac)

**Construction:** ABS plastic + rubber protective anti-impact

**Degree of Protection:** IP-60

## XM-100 / XM-120

### Signal Converter 1 or 2 analog outputs



Converts frequency signals (Pick-Up and tachogenerator), voltage (0 ~ 1 ~ 5Vdc and 10Vdc) and current (4-20mA) standard.

#### Inputs:

- 1 analog input: 0 ~ 10Vdc, 1 ~ 5VDC, 0 ~ 20, 4 ~ 20mA
- 1 Vac Voltage: 0 ~ 30Vac / Frequency: 0 ~ 10kHz

#### Output:

##### XM-100

- 1 analog output: 0 ~ 10Vdc, 4 ~ 20mA (other models on request)

##### XM-120

- Output 1: 0 ~ 10Vdc, 4 ~ 20mA (other models on request)
- Output 2: 0 ~ 20, 4 ~ 20mA

**Consumption:** 2.4 VA

**Power Supply:** 127/220Vac or 24Vdc

**Construction:** ABS plastic

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-30

**Dimensions:** 45 x 75 x 105mm

## TRM-250N

### AC / DC Signal Converter



AC / DC Signal Converter. Alternate Current Input. Output in continuous voltage or current. Ideal for signal converter CTs and PTs.

**Inputs:**

1 AC Input 0 ~ 0 ~ 5Aac or 1Aac

**Output:**

1 Output 0 ~ 20/4 ~ 20mA / 1 ~ 5Vdc / 0 ~ 10Vdc (specify)

**Consumption:** 4.1 VA

**Power Supply:** 127/220Vac

**Construction:** ABS plastic

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-30

**Dimensions:** 45 x 75 x 105mm

## SCV-700

### Synchronism Module



Signal Converter / Distributor with galvanic isolation and synchronism. Optional adjustable input gain adjustment potentiometer and relative synchronism by individual potentiometer output. Input available for local operation (potentiometer or remote - analog input) with action "bump-less".

**Inputs:**

1st Input

- Voltage: 0 ~ 10Vdc, 0 ~ 15Vdc, 0 ~ 20Vdc
- Current: 0 ~ 20mA, 4 ~ 20mA

2nd Input

- Potentiometer 10k Ohms

**Output:**

2, 4 or 6 (specify)

- Voltage: 0 ~ 10Vdc, 0 ~ 15VDC, 0 ~ 20Vdc
- Current: 0 ~ 20mA, 4 ~ 20mA

**Consumption:** 9.5 VA at 85Vac and 264Vac 13.7 in VA

**Power Supply:** Full range (90 ~ 240Vac)

**Construction:** ABS plastic

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-30

**Dimensions:** 100 x 75 x 105mm

\* Does not include potentiometer

## AL-2003

### Alarm Annunciator



Alarm annunciator with sequence as ISA.4A with 14 channels. Each channel has an input (PNP or NPN). Transistor output (NPN or PNP) for signalling with lamp, traffic sign (signaller) or LED in 24Vdc and maximum current 0.1 A. It also has internal source of 24Vdc, 0.28 A for Power Supply signalling.

**Inputs:**

14 Inputs: PNP or NPN (specify)

Input 1: Shut up siren and lamp test

**Output:**

14 Outputs: PNP or NPN maximum current of 0.1 A at 24 Vdc  
output 1: SPDT controls for siren 3A

**Consumption:** 17.7 VA

**Power Supply:** Full range (90 ~ 240Vac)

**Construction:** ABS plastic

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-30

**Dimensions:** 100 x 75 x 105mm

## RN-110

### Level Relay



Level relay for two conductive probes input: one High (HI) and other Low (LO), with sensitivity settings and individual filter. It also has inputs for verification failures.

**Inputs:**

2 Conductive Probes or Capacitive Sensor

**Output:**

2 SPDT relay outputs to

**Consumption:** 5.0 VA

**Power Supply:** 127/220Vac

**Construction:** ABS plastic

**Mounting:** 35mm DIN Rail

**Degree of Protection:** IP-30

**Dimensions:** 45 x 75 x 105mm

## RA-110

### Antifoam Relay

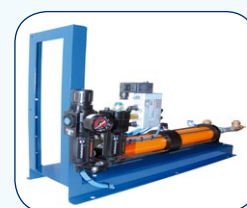


Antifoam Relay used for level control in fermentation vats. Can be used on its input one or two primary elements of foam level detection, conductive probe type.

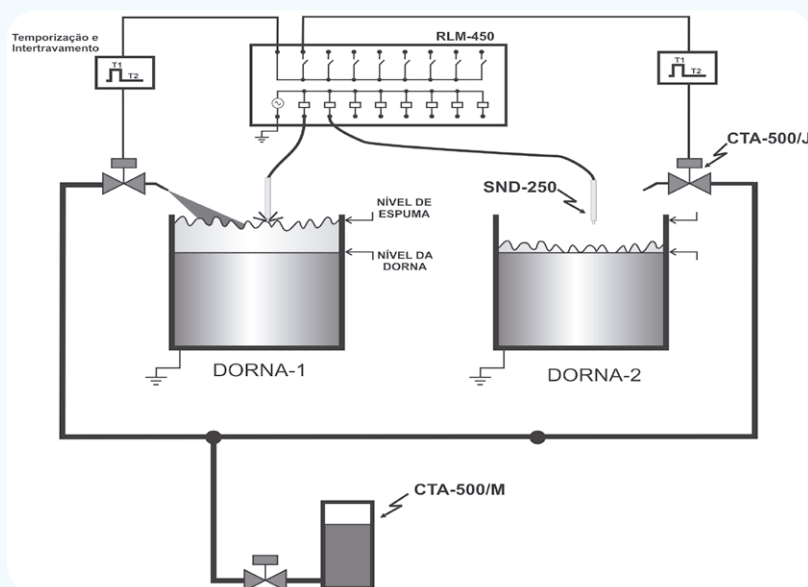
**Inputs:**  
2 inputs Conductive Probe  
**Output:**  
2 SPDT relay outputs  
**Consumption:** 5.0 VA

**Power Supply:** 127/220Vac  
**Construction:** ABS plastic  
**Mounting:** 35mm DIN Rail  
**Degree of Protection:** IP-30  
**Dimensions:** 45 x 75 x 105mm

## Antifoam



Code	CTA-500/M	CTA-500/J	CTA-500/D	CTA-200/I
Name	Reservoir and Ejector	Ejection Kit	Detection Kit	Individual dosing of antifoam
Descriptive	Mechanical assembly system for ejection of antifoam Product. Includes stainless steel drum/barrel of 200 liters, piston, pressure regulator, lubricator, pressure gauge, check valve.	Ejection Kit, containing: 1) Solenoid valve with 3/8" hole 2) 1/2" Nozzle Ejector 3) 1/2" Nipple spigot	Detection kit, comprising: 1) Foam Electrode Sensor (SND-250) 2) Support in stainless steel (SND-250/F) developed for use with relays RLM-450, RN-320 and RN-110	Single Feeder Automatic Antifoam for vats containing: 1) Chassis built in bracket steel 2) Cylinder double built in brass Adjustments in dosage 0 to 500ml 3) Set the filter regulator -pressure gauge and line lubricator 4) 5-way solenoid valve 5) Foam Electrode Sensor in stainless steel bracket 6) Nozzle Ejector
Construction	Barrel: Steel Base: Steel Piston: Stainless Steel	Tip Probe: Stainless Steel Flange: Stainless Steel and Carbon Steel Bushing: Polypropylene	Tip Probe: Stainless Steel Flange: Stainless Steel and Carbon Steel Bushing: Polypropylene	
Consumption	•	16VA	•	



## Switching Power Supply

The DLG Power Supply present in its main features high efficiency and reliability for industrial use. It is suitable for applications where environmental conditions are more severe and access is more difficult. Suitable for applications in SELV and PELV circuits, Power Supply sensors, transmitters, indicators, converters and electronics in general.



**XCSD30C**

**Power Supply:** 90 ~ 264Vac / 100 ~ 370Vdc  
**Output Voltage:** 24Vdc/1.2A  
 Protection Overload / short circuit  
 Power Supply Indication  
**Degree of Protection:** IP-20  
**Construction:** Plastic UL 94 V-0  
**Mounting:** 35mm DIN Rail  
**Dimension:** 70 x 88 x 62mm



**XCSD70C**

**Power Supply:** 90 ~ 264Vac / 100 ~ 370Vdc  
**Output Voltage:** 24Vdc/3A  
 Protection Overload / short circuit  
 Power Supply Indication  
**Degree of Protection:** IP-20  
**Construction:** Plastic UL 94 V-0  
**Mounting:** 35mm DIN Rail  
**Dimension:** 70 x 88 x 62mm



**XCSF85B**

**Power Supply:** 90 ~ 240Vac / 100 ~ 345Vdc  
**Output Voltage:** 12 ~ 15Vdc/6A  
 Protection Overload / short circuit  
 Power Supply Indication  
**Degree of Protection:** IP-20  
**Construction:** Aluminium and stainless steel  
**Mounting:** 35mm DIN Rail  
**Dimension:** 39 x 128 x 115mm



**XCSP120C**

**Power Supply:** 90 ~ 264Vac / 100 ~ 370Vdc  
**Output Voltage:** 24Vdc/5A  
 Protection Overload / short circuit  
 Power Supply Indication  
**Degree of Protection:** IP-20  
**Construction:** Aluminium and stainless steel  
**Mounting:** 35mm DIN Rail  
**Dimension:** 55 x 115 x 130mm



**XCSP240C**

**Power Supply:** 90 ~ 264Vac / 300 ~ 350Vdc  
**Output Voltage:** 24Vdc/10A  
 Protection Overload / short circuit  
 Power Supply Indication  
**Degree of Protection:** IP-20  
**Construction:** Aluminium  
**Mounting:** 35mm DIN Rail  
**Dimension:** 73 x 140 x 137mm



**XCSF500C**

**Power Supply:** 90 ~ 264Vac  
**Output Voltage:** 24Vdc / 20A  
 redundant  
 Protection Overload / short circuit  
 Power Supply indication, overload and  
 Alarm Contact  
**Degree of Protection:** IP-20  
**Construction:** Aluminium  
**Mounting:** 35mm DIN Rail  
**Dimension:** 80 x 127 x 139mm





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