

LARTET

DT-110X

**RS-232 and RS-485
serial port**



100 mm high digits. Industrial environment
Readable from up to 50m
1 o 2 displaying sides.

Characteristics

Message display designed to be used in industrial environment.

Real time clock: Seconds / Minutes / Hours / Days / Month / Year. It is adjustable by two push buttons. The clock is NiMH battery backup, which lasts approximately one month.

Option: Relative humidity and temperature sensor.

Applications

To display any message from a PC: Production rates, Scada software (LabView), alphanumeric readouts.

To display any data from a PLC: Temperature, engine RPM, alarm messages.

It can be connected to typical PLC relay or transistor outputs.

Message edition

Editing and saving messages on the display.

Messages are edited by PC with the TDL software. Applications in which the display receive the complete message by the serial line you may store only de message 0, because message 0 is used at the display start up.

Recording messages.

Messages edited by PC are sent to display by serial line and the remain saved in a Eeprom memory. Batteries are not needed for message maintenance.

Operation

Message control

DT-X displays are destined to be controlled by a computer PC, by PLC, or any device with serial line RS-232 or RS-485 output.

With RS-232 the maximum recommended working distance is 10 meters, while the RS-485 serial line it can be up to 1000 meters.

Communication protocols: Several protocols are available to adapt to the needs of each applications.

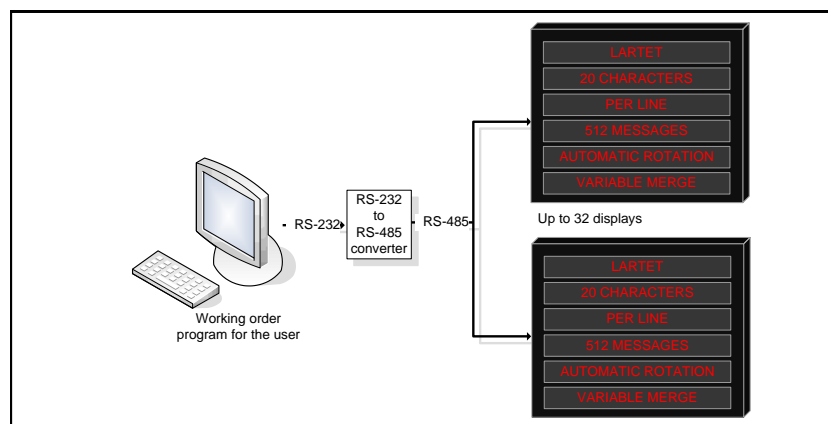
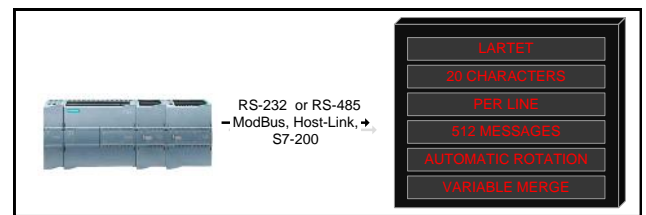
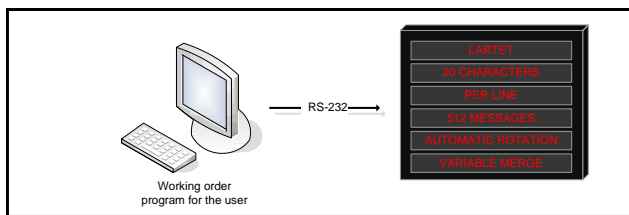
Lartet Protocol: The sent message is kept on the display screen in an internal buffer, until the arrival of a new message.

Modbus Protocol: Follows the specifications of this protocol. RTU Mode.

ASCII Protocol: It is an easy-to-use protocol that does not use CRC.

Host-Link Protocol: To connect with Omron PLCs using the Host-Link protocol. For the connection with the Host-Link protocol, the RS-232 or RS-422 (4 wire) connection can be use but not the RS-485. To order a device with the RS-422 option, it must be indicated in the order.

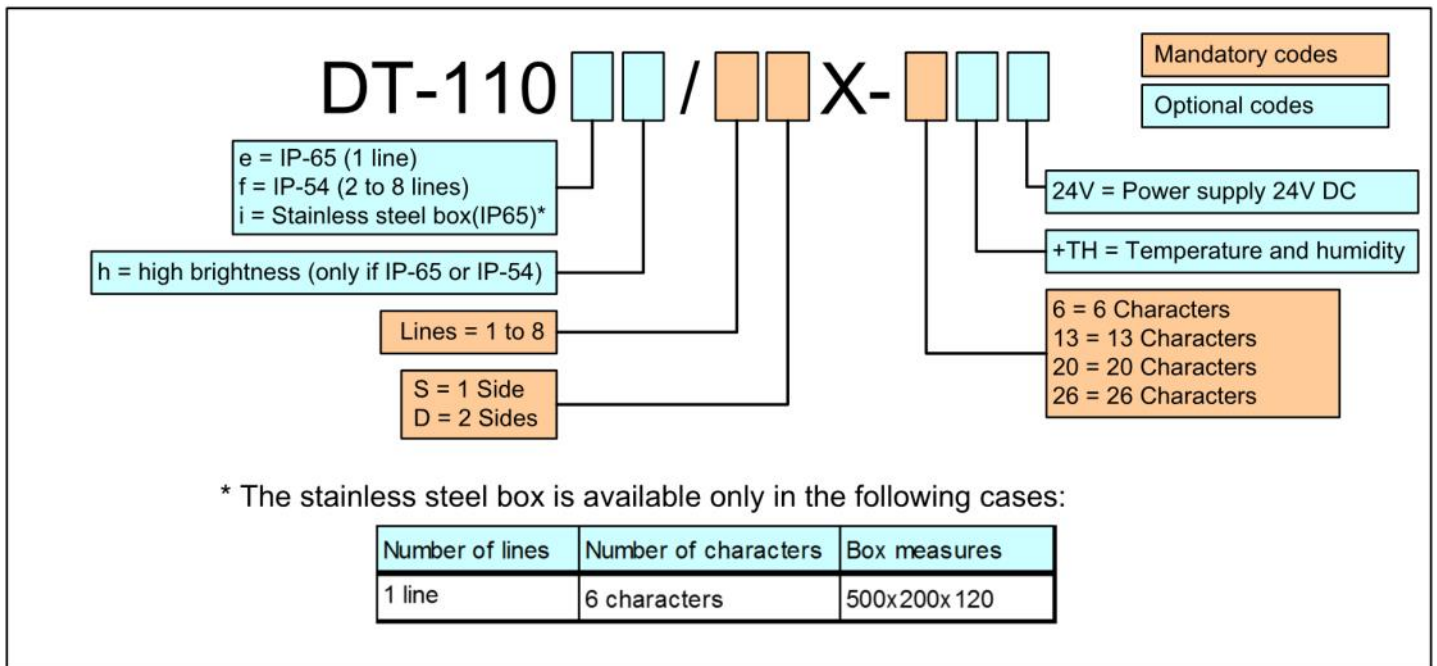
S7-200 Protocol: To connect with Siemens S7-200 series PLCs.



General characteristics

Number of sides	1 o 2			
Number of lines	1 to 8 lines			
Character/line	6, 13, 20 or 26 characters			
Display matrix	LED, 5 x 7 dot matrix			
Character height	100mm			
Reading distance	50 meters			
Maximum environmental lighting	DT-110 = 1000 lux. DT-110h = Outdoor			
Power supply	100 to 240 VAC 50 to 60Hz. Option 24VCC.			
	Dimensions (mm)			
	6 characters	13 characters	20 characters	26 characters
1 line	666 x 177 x 120	1276 x 177 x 120	1886 x 177 x 120	2496 x 177 x 120
2 lines	666 x 378 x 120	1276 x 378 x 120	1886 x 378 x 120	2496 x 378 x 120
3 lines	666 x 591 x 120	1276 x 591 x 120	1886 x 591 x 120	2496 x 591 x 120
4 lines	666 x 805 x 120	1276 x 805 x 120	1886 x 805 x 120	Not available
5 lines	666 x 1018 x 120	1276 x 1018 x 120	1886 x 1018 x 120	Not available
6 lines	666 x 1232 x 120	1276 x 1232 x 120	1886 x 1232 x 120	Not available
7 lines	666 x 1445 x 120	1276 x 1445 x 120	Not available	Not available
8 lines	666 x 1659 x 120	1276 x 1659 x 120	Not available	Not available
Protection degree	DT-110 = IP41 DT-110f = IP54 DT-110e = IP65			
Max. number of messages	512 messages			
Max. Length of the message	160 characters			
Messages memory	EEPROM 32kB			
Case/display	Aluminium section in black. Display in extruded antireflex methacrilate			
Humidity + temperature accuracy	Temperature $\pm 0,5^{\circ}\text{C}$ typ $\pm 2,5$ MAX. Humidity $\pm 4,5\%$ between 20% and 80%. Probe length:			
Operation temperature	From -20°C to 60°C			
Stock temperature	From -30°C to 70°C			

Reference composition



LARTET®