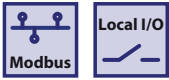


LSTAT-800, LSTAT-801, LSTAT-802

Datasheet #89034318



The L-STAT is a network thermostat device with a modern, minimalistic look that fits any interior design. It is directly connected to a LOYTEC controller with a Modbus interface such as LIOB-AIR or L-ROC.

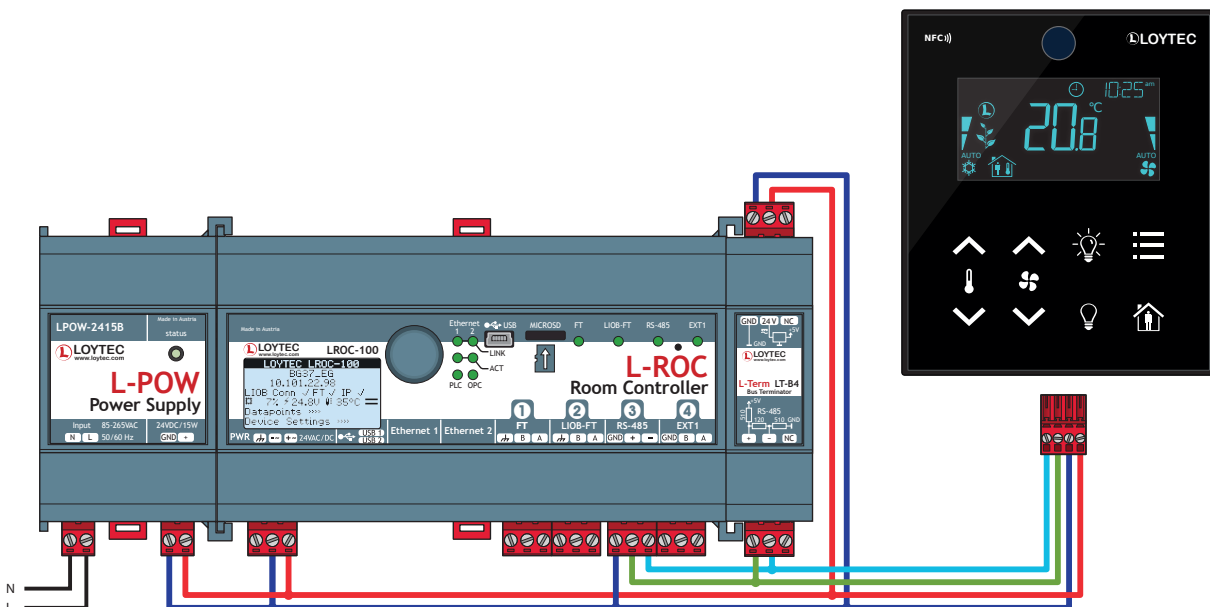
Up to 16 L-STAT devices can be connected to one controller to offer control at different locations in- or outside even for the largest rooms. The L-STAT is equipped with a segmented LCD display featuring an RGB backlight with adjustable color, offering a neat way to make the L-STAT match the interior color concept of an office building. Eight capacitive touch buttons are used to cycle through sensor values, display parameters, and adjust setpoints. Up to four external buttons can be accessed and processed by the controller.

The L-STAT's internal sensors measure temperature, humidity, dew point, occupancy, and CO₂ level. Sensor values can be displayed in SI or US units. Additionally, the date and time as well as the current level of eco-friendliness in the form of green leaves are also displayed on the LCD display. Parameters controlled by the controller's logic can be overridden on the L-STAT, such as for occupancy, air conditioning, and ventilation. A direct access mode is available to quickly adjust the most important setpoints e.g. for temperature and ventilation control.

A buzzer provides acoustic feedback for the touch buttons and can also be used to indicate alarms and error states. To prevent unauthorized modifications, two access levels (end user, system integrator) are used, which are secured via 4-digit pin codes. Device replacement, firmware upgrade, and L-STAT configuration are performed with very little effort through the controller. The L-STAT device is represented in the controller by a simple data point interface, which can be directly connected to the IEC 61131 or IEC 61499 logic application and offers all common functions for data points such as alarming, scheduling, trending, historic filters, math functions, etc.

Using an NFC tag, the L-STAT transmits the URL of the controller's web interface to mobile devices for more extensive control and administrative tasks. Last but not least, the L-STAT comes with a built-in infrared receiver for comfortable remote control.

LSTAT-80x-Gx-L3



L-STAT Network Thermostat

LSTAT-800, LSTAT-801, LSTAT-802

Specifications			
Type	LSTAT-800-Gx-Lx	LSTAT-801-Gx-Lx	LSTAT-802-Gx-Lx
Dimensions (mm)	94.5 x 110 x 19.5 (W x H x D), DIM032		
Installation	Onto a flush-mounted box		
Power supply	24 VDC \pm 10 %, max. 0.8 W		24 VDC \pm 10 %, max. 1.8 W
Operating conditions	0 °C to 50 °C, 10 – 90 % RH @ 50 °C, non condensing, degree of protection: IP30		
Display	LCD display with backlight, and choice of RGB color		
Interfaces, sensors	1 x RS-485 (ANSI TIA/EIA-485): Modbus RTU (Slave), adjustable bus speed 1 200 – 115 200 bit/s (typical 57 600 bit/s), configurable transmission mode (typical "8E1", 1 start bit, 8 data bits, even parity, 1 stop bit) 1 x NFC (Near Field Communication) 1 x Buzzer 1 x Internal temperature sensor 1 x Internal relative humidity sensor 3 x Digital Input for connection of standard switches and pushbuttons 1 x Universal Input, configurable either for L-TEMP2 (NTC temperature sensor) or for connection of standard switches and pushbuttons 1 x Infrared receiver		
	-	1 x Occupancy sensor	
	-	1 x CO ₂ sensor	
Buttons (capacitive touch)	LSTAT-80x-Gx-L1: 4 x Button with temperature up/down, occupancy, and menu LSTAT-80x-Gx-L2: 6 x Button with temperature up/down, fan up/down, occupancy, and menu LSTAT-80x-Gx-L3: 8 x Button with temperature up/down, fan up/down, light on/off, occupancy, and menu LSTAT-80x-Gx-L4: 8 x Button with temperature up/down, sunblinds up/down, light on/off, occupancy, and menu LSTAT-80x-Gx-L5: 8 x Button with temperature up/down, fan up/down, sunblinds up/down, occupancy, and menu LSTAT-80x-Gx-L6: 8 x Button with temperature up/down, fan up/down, sunblinds up/down, light, and menu		
For use with	L-INX, LIOB-AIR, L-ROC Controller, Third party controller with Modbus Master via Modbus RTU		
Specifications of the sensors			
Temperature measurement	Sensor type: CMOS, range: -40 – 125 °C, resolution: 0.1 °C, accuracy: \pm 0.5 °C (5 – 60 °C)		
Relative Humidity (R.H.)	Sensor type: capacitive humidity sensor, range: 0% – 100% R.H., resolution: 0.1 % R.H., accuracy: \pm 2 % R.H. @ 25 °C, 20% – 80% R.H. \pm 3 % R.H. @ 25 °C, 0% – 20% R.H. and 80% – 100% R.H., respectively		
Infrared occupancy detector, maximum detection range	5 m, 64 zones, opening angle horizontal: 94°, vertical: 82°, difference in temperature: target to environment: > 4 °C		
CO ₂	0 – 2 000 ppm, \pm 30 ppm or \pm 3 %		
Infrared receiver	NEC protocol (Apple Remote compatible)		

LSTAT-800, LSTAT-801, LSTAT-802

Order number	Product description
LSTAT-800-G3-L1	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, IR receiver, Buttons (L1): temperature up_down/occupancy/menu
LSTAT-800-G3-L2	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, IR receiver, Buttons (L2): temperature up_down/fan up_down/occupancy/menu
LSTAT-800-G3-L3	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, IR receiver, Buttons (L3): temperature up_down/fan up_down/light on_off/occupancy/menu
LSTAT-800-G3-L4	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, IR receiver, Buttons (L4): temperature up_down/sunblinds up_down/light on_off/occupancy/menu
LSTAT-800-G3-L5	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, IR receiver, Buttons (L5): temperature up_down/fan up_down/sunblinds up_down/occupancy/menu
LSTAT-800-G3-L6	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, IR receiver, Buttons (L6): temperature up_down/fan up_down/sunblinds up_down/light/menu
LSTAT-801-G3-L1	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, occupancy, IR receiver, Buttons (L1): temperature up_down/occupancy/menu
LSTAT-801-G3-L2	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, occupancy, IR receiver, Buttons (L2): temperature up_down/fan up_down/occupancy/menu
LSTAT-801-G3-L3	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, occupancy, IR receiver, Buttons (L3): temperature up_down/fan up_down/light on_off/occupancy/menu
LSTAT-801-G3-L4	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, occupancy, IR receiver, Buttons (L4): temperature up_down/sunblinds up_down/light on_off/occupancy/menu
LSTAT-801-G3-L5	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, occupancy, IR receiver, Buttons (L5): temperature up_down/fan up_down/sunblinds up_down/occupancy/menu
LSTAT-801-G3-L6	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, occupancy, IR receiver, Buttons (L6): temperature up_down/fan up_down/sunblinds up_down/light/menu
LSTAT-802-G3-L1	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, occupancy, IR receiver, CO2, Buttons (L1): temperature up_down/occupancy/menu
LSTAT-802-G3-L2	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, occupancy, IR receiver, CO2, Buttons (L2): temperature up_down/fan up_down/occupancy/menu
LSTAT-802-G3-L3	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, occupancy, IR receiver, CO2, Buttons (L3): temperature up_down/fan up_down/light on_off/occupancy/menu
LSTAT-802-G3-L4	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, occupancy, IR receiver, CO2, Buttons (L4): temperature up_down/sunblinds up_down/light on_off/occupancy/menu
LSTAT-802-G3-L5	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, occupancy, IR receiver, CO2, Buttons (L5): temperature up_down/fan up_down/sunblinds up_down/occupancy/menu
LSTAT-802-G3-L6	Network Thermostat, front black, white enclosure, Modbus, NFC, temperature, rel. humidity, ext. switch/NTC, occupancy, IR receiver, CO2, Buttons (L6): temperature up_down/fan up_down/sunblinds up_down/light/menu
LSTAT-80x-CUSTOM	Customized room control unit, min qty 100 pcs, enclosure G1: silver, G2: black, G3: white; custom print Lx, including 2 working samples, lead time 10 weeks

A complete list of L-STAT models is available on our website www.loytec.com/lstat.

L-STAT Network Thermostat

LSTAT-800, LSTAT-801, LSTAT-802

L-STAT Button Configuration Overview

L-STAT-80x-G3-L1



L-STAT-80x-G3-L2



L-STAT-80x-G3-L3



L-STAT-80x-G3-L4



L-STAT-80x-G3-L5



L-STAT-80x-G3-L6

