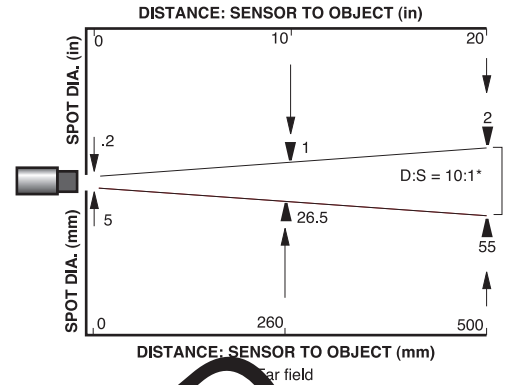## Non-contact Infrared Temperature Measurement System — NCIT-LC Plus Series

Measurement Specifications

Temperature Range:	-40 to 1112°F (-40 to 600°C)
Spectral Response:	8 to 14 μm
Optical Resolution:	10:1
System Accuracy:	±1% or ±1°C, whichever is greater
Repeatability:	±0.5% or ±0.5°C, whichever is greater
Response Time:	150 ms, 95% of final reading
Emissivity:	Digitally adjustable, 0.1 to 1.10 by increments of 0.001 steps
Signal Processing:	Peak hold, Valley hold, Variable averaging filter, adjustable up to 998 sec.

Electrical Specifications

Programmable Outputs:	0/4 - 20 mA, 0 - 5 Vdc (scalable) J or K thermocouple 10 mV / °C head ambient signal
Power (user to supply unit):	12 - 24 Vdc @ 100 mA
Max. Loop Impedance:	500Ω with 24 Vdc power supply

Sensor Specifications

|	
Environmental Rating:	NEMA 4 (IP65)
Max. Ambient Temperature:	Sensing head: 32° to 185°F (0 to 85°C) With air cooling up to 392°F (200°C) Elect. housing: 32° to 149°F (0 to 65°C)
Relative Humidity:	10 to 95%, non-condensing
Weight:	Sensing head: 50g w/cable, stainless steel Electronics housing: 270g, Zinc, die-cast

Note: The basic system includes the sensing head and nut, die cast housing with pre-mounted electronic board, 3m (10 ft.) cable, and operator manual.

DISTANCE: SENSOR TO OBJECT (in) / DISTANCE: SENSOR TO OBJECT (mm) — D:S = 10:1*

Model Numbers

Part Number	Optical Resolution	Cable Length	Range Type
REN00150	10 : 1	10 ft. / 3 m	LT - low temp
REN00155	10 : 1	3 ft. / 1 m	LT - low temp
REN00170	22 : 1	10 ft. / 3 m	LT - low temp
REN00175	22 : 1	3 ft. / 1 m	LT - low temp
with RS485 data interface			
REN00151	10 : 1	10 ft. / 3 m	LT - low temp
REN00156	10 : 1	3 ft. / 1 m	LT - low temp
REN00171	22 : 1	10 ft. / 3 m	LT - low temp
REN00176	22 : 1	3 ft. / 1 m	LT - low temp

Communication Accessory Connection Kits are required for setup and monitoring of extended multi-drop features. One kit can service multiple sensors. These kits contain DataTemp® Multi-Drop software and connectors to provide for simple setup of analog/digital inputs and outputs of the optional RS232 or RS485 interface via a PC.

REN00306 — RS485 2-wire connection kit provides for setup and monitoring via DataTemp® Multi-Drop software and a RS485/RS232 converter provided with 110Vac power supply

REN00307 — RS232 connection kit provides for setup and monitoring via DataTemp® Multi-Drop software and a 3-wire RS232 connection

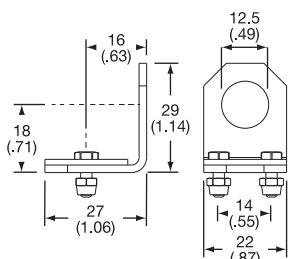**REN00209** — Power supply: 12 Vdc at 200 mA, 120 Vac input

Sensor Head

28mm (1.1") — 17mm (0.67") — 14mm (0.55") — M12 × 1
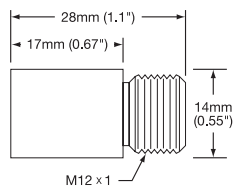
Dim.= $\dfrac{mm}{(in)}$

Electronics Enclosure

25 (1.0) — 80 (3.2) — 60 (2.4)
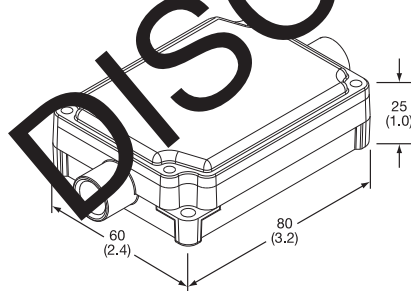
Optional: Electronics enclosure with view port window in cover
Part Number: REN00308

Air Cooling System – REN00301

40 (1.57) — 30 (1.18) — 4 (.15) — 14 (.55) — 28 (1.1) — 8 (.3)

with 2.8 ft. (0.8m) of insulated air hose

Adjustable Mounting Bracket – REN00303

16 (.63) — 12.5 (.49) — 29 (1.14) — 18 (.71) — 27 (1.06) — 14 (.55) — 22 (.87)

Optical Lens Air Purging Jacket – REN00302

21 (.83) — M12×1 — Hose with 3 (.12) I.D. and 5 (.2) O.D. — 47 (1.85)
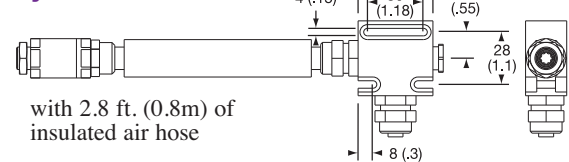
Ordering Information

Choose the **NCIT-LC Plus, accessories, and/or options** desired, and order by the associated part number.

Standard lead time is stock to 3 weeks.