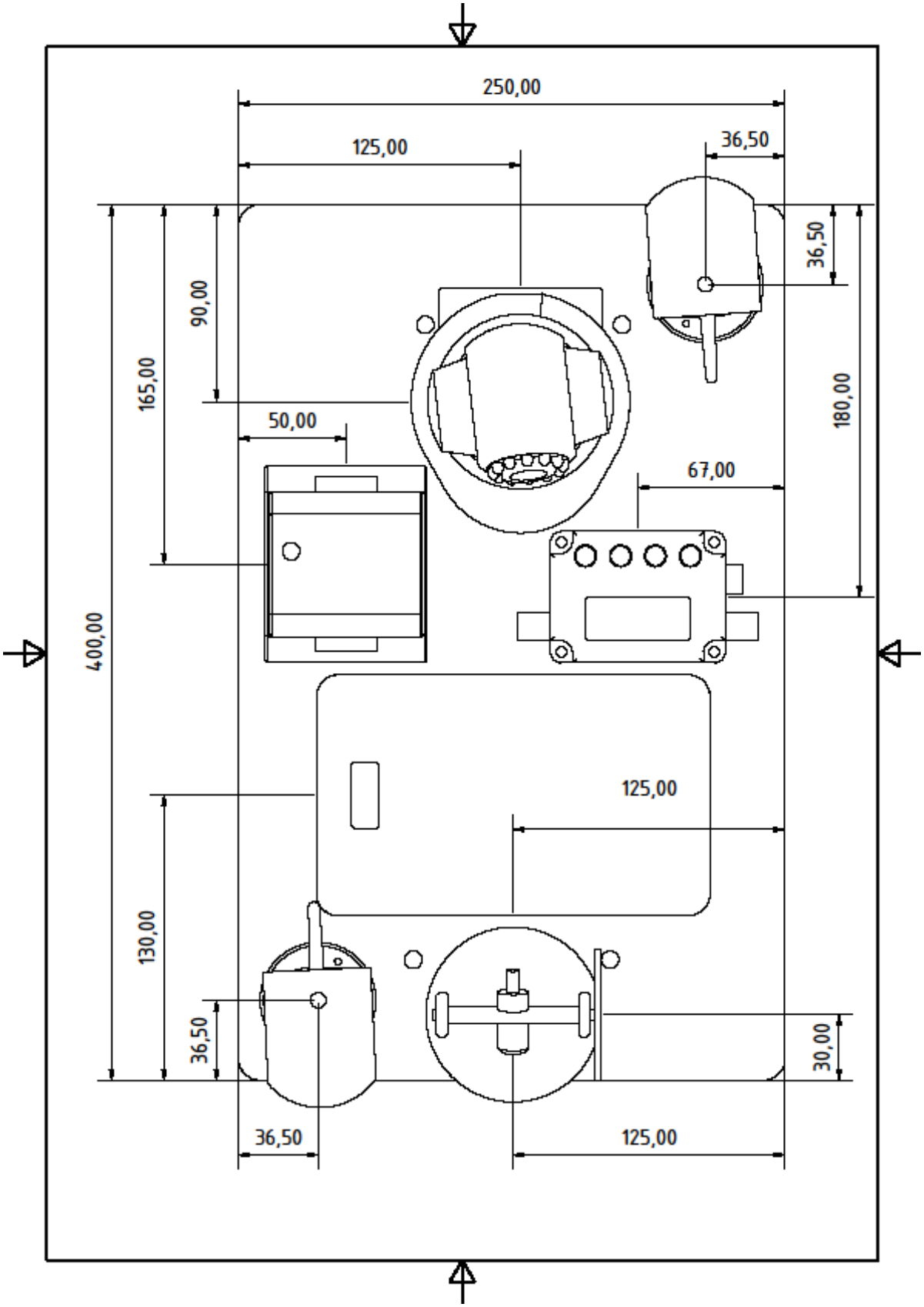

250,00
125,00
36,50
36,50
90,00
165,00
180,00
50,00
67,00
400,00
125,00
130,00
36,50
30,00
36,50
125,00

Technical Data

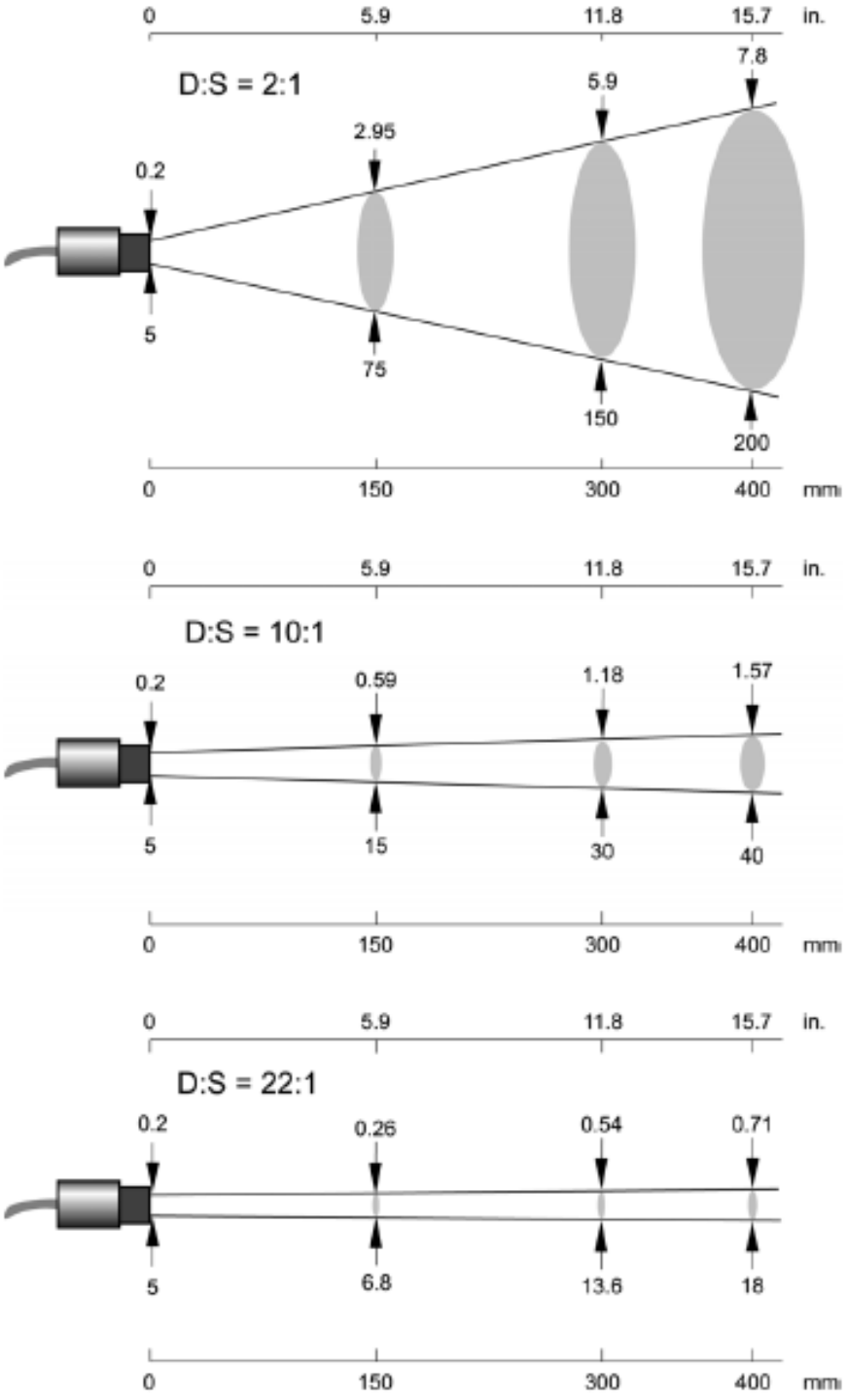


Figure 1: Spot Size Charts

3.1.3 Environmental Specification

Ambient Temperature	-10 to 120°C (14 to 248°F)
Storage Temperature	-20 to 85°C (-4 to 185°F)
Rating	IP65 (NEMA-4)
Relative Humidity	10% to 95% non-condensing
EMI	IEC 61326-1:2006 performance criteria A, 10 V/m
Vibration	IEC 68-2-6: 3 G, 11 to 200 Hz, 3 axes
Shock	IEC 68-2-27: 50 G, 11 ms, 3 axes
Weight	50 g (1.8 oz)
Material	
Head	Stainless steel
Head Cable	PUR (Polyurethane), Halogen free, Silicone free

3.1.4 Dimensions

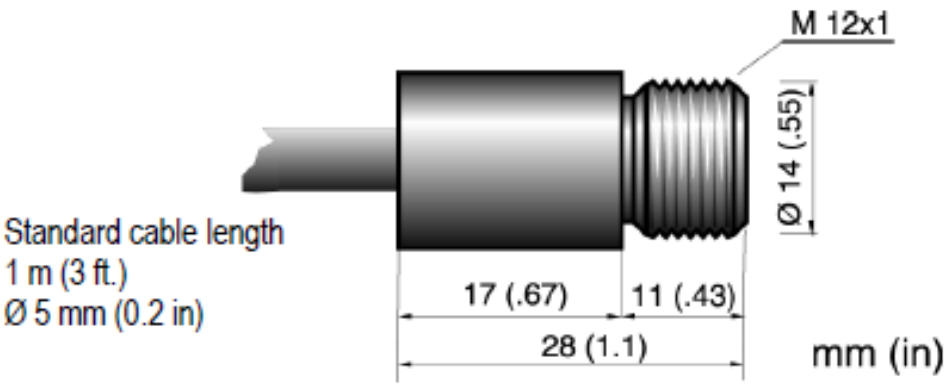


Figure 2: Dimensions of Sensing Head

3.2 Comm Box (MI3COMM)

3.2.1 Measurement Specification

Accuracy[6]

All models

mA output	± 1% of reading or ± 1°C (± 2°F) whichever is greater ± 2°C (± 4°F) for target temp. < 20°C (68°F)
TC output	± 1% of reading or ± 2.5°C (± 5°F) whichever is greater

Repeatability

All models	± 0.5% of reading or ± 0.5°C (± 1°F) whichever is greater

Temperature Resolution[7]

mA Output	± 0.1°C (± 0.2°F)

Emissivity

All models	0.100 to 1.100

Transmission

All models	0.100 to 1.000

Temperature Coefficient[8]

All models	± 0.05°C per °C

3.2.2 Electrical Specification

Power Supply	8 to 32 VDC, max. 4 W

[6] at ambient temperature 23°C ±5°C (73°F ±9°F), ε = 1.0, and calibration geometry

[7] for a zoomed temperature span of < 500°C (932°F)

[8] at ambient temperatures < 18°C (64°F) and > 28°C (82°F)

Technical Data

Analog Outputs

Output 1	0 to 5 V output for head ambient temperature (0 to 500°C, 32 to 932°F) electrically **not** isolated from power supply
TC	Thermocouple (type J, K, R, or S)
Output 2	0 to 20 mA (active), or 4 to 20 mA (active), or 0 to 5 V, or 0 to 10 V electrically **not** isolated from power supply

Alarm Output

1 potential-free relay output, 48 V / 300 mA,
for target temperature or head ambient temperature,
electrically isolated from power supply

External Inputs

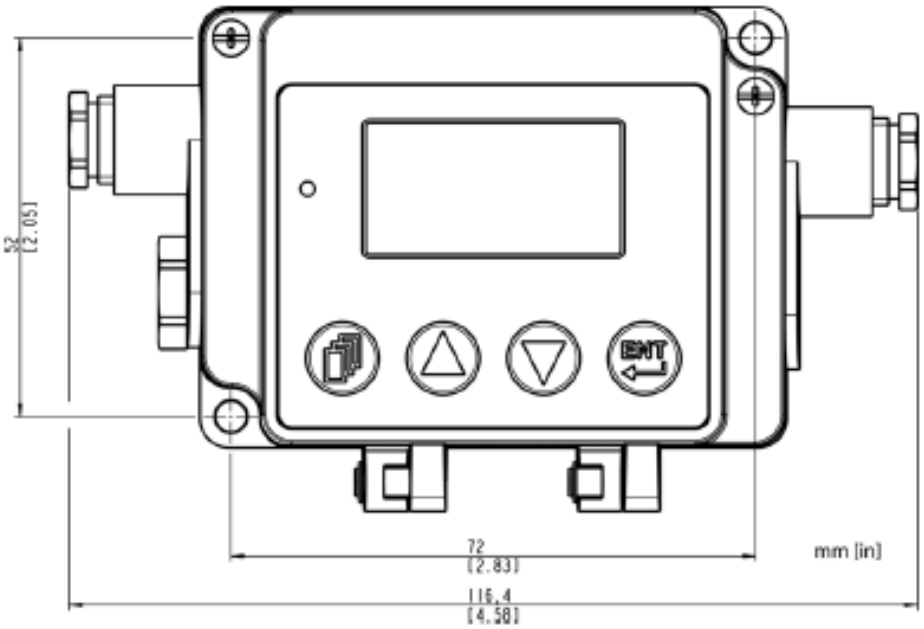
3 inputs are available useable in different modes:

FTC1-3	Emissivity control: 3 bit digital coded, 0 to V_{SS}
FTC1	Emissivity control: analog, 0 to 5 V_{DC}
FTC2	Ambient temperature compensation: analog, 0 to 5 V_{DC}
FTC3	for trigger/hold functions, 0 to V_{SS}

Communication Interfaces

USB (standard):
Version: 2.0
Connector on the board: type Mini-B

RS485 (optional):
for use over long distance or multi-drop networked
communication boxes. A dedicated adapter is recommended in



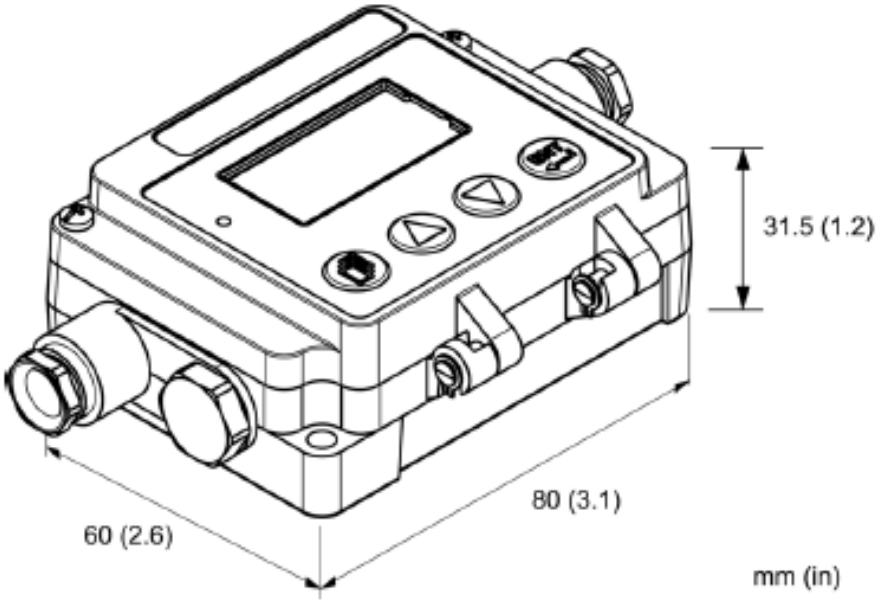


Figure 3: Dimensions of Communication Box

3.2.5 Scope of Delivery

The scope of delivery includes the following:

- Communication box

3.3 DIN Rail Comm Box (MI3MCOMM)

3.3.1 Measurement Specification

The measurement specification is identical to the communication box, see section 3.2.1 Measurement Specification, on page 19.

3.3.2 Electrical Specification

Power Supply 8 to 32 VDC, max. 4 W

Alarm Output

1 potential-free relay output, 48 V / 300 mA,
for target temperature or head ambient temperature,
electrically isolated from power supply

External Input

The external input is useable as:

Trigger channel for trigger/hold functions, 0 to V_{ss}

Communication Interfaces

USB (standard):

Version: 2.0
Connector on the board: type Mini-B

RS485 (optional):
for use over long distance or multi-drop networked communication boxes. A dedicated adapter is recommended in section 10.10 USB/RS485 Adapter, on page 89.

Address range: --, 1, 2, ..., 32
Baud rate: 9.6, 19.2, 38.4, 57.6, 115.2 kBit/s
Wiring: 2 wire, half-duplex, electrically isolated

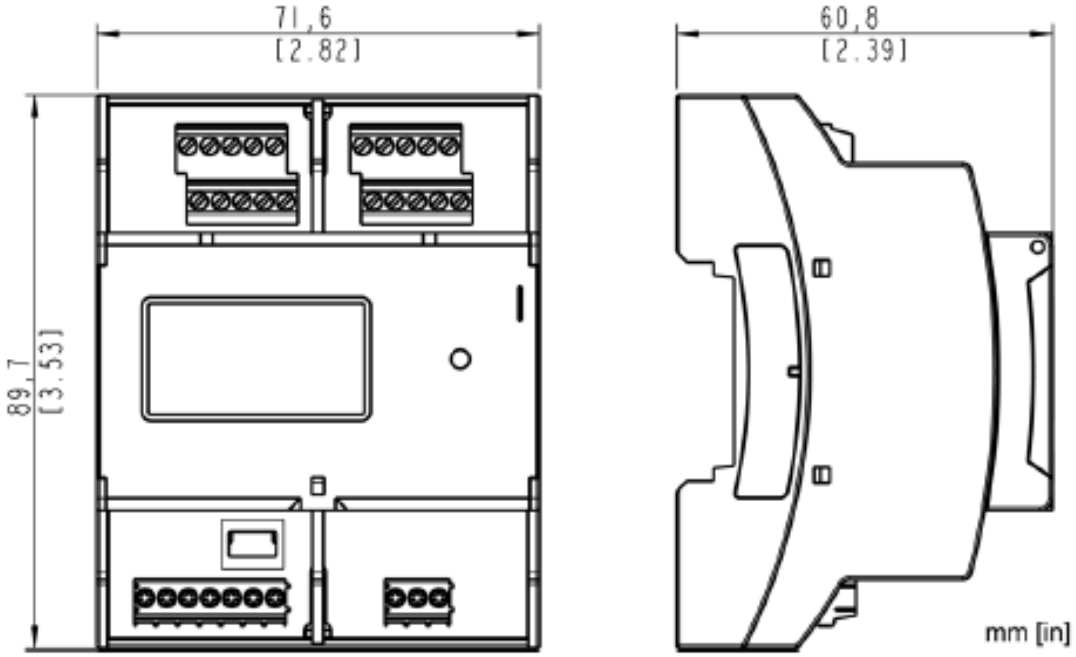


Figure 4: Dimensions of DIN Rail Communication Box

3.3.5 Scope of Delivery

The scope of delivery includes the following:

- Communication box
- Software CD
- Quickstart Guide