# > TOUCHPOINT NANO
## Roombus



With the Touchpoint Nano, users of a room can set and display the living climate.

## Characteristics

- control functions for:
    - type 1: temperature
    - type 2: temperature and ventilation
- 4 digital inputs
- variants: Gira, Busch Jaeger and EDIZIO
- the language-independent display can be read clearly in various lighting conditions
- mounting in standard flush-fit box
- immediately ready for use in a Roombus configuration

### Variants: Gira, Busch Jaeger and EDIZIO

The Touchpoint Nano is available in different variants and for various types of switchgear. This means that for every room a Touchpoint Nano is available that matches the design of that room.

For each variant, a type without fan control (type 1) and a type with fan control (type 2) is available.

### The language-independent display can be read clearly in various lighting conditions

The use of universal icons instead of text means that the Touchpoint Nano is language-independent. The display can be read clearly in various lighting conditions.

### Immediately ready for use in a Roombus configuration

Via the Roombus interface, the device can be immediately included in a Roombus configuration with a Comforte CX2 or Comforte CX2 VAV.

## TouchPoint Nano specifications

| General | | | | | | |
|---|---|---|---|---|---|---|
| Article description | Touchpoint Nano Gira | | Touchpoint Nano Busch Jaeger | | Touchpoint Nano Feller EDIZIO | |
| Fan control | No (type 1) | Yes (type 2) | No (type 1) | Yes (type 2) | No (type 1) | Yes (type 2) |
| Article number | 400311 | 400314 | 400312 | 400315 | 400313 | 400316 |
| Dimensions front view (ABC) | 80 x 80 x 14 mm | | 81 x 81 x 14 mm | | 88 x 88 x 14 mm | |
| Dimensions of flush-fit box (XYZ) | 52 x 52 x 33 mm | | | | | |
| Weight | 100 grams | | | | | |
| Indication | the LEDs are visible after disassembling the screen<br>• supply voltage OK indication (green LED)<br>• error indication (red LED)<br>• Tx/Rx indication (yellow LED) | | | | | |

PRIVA
CREATING A CLIMATE FOR GROWTH
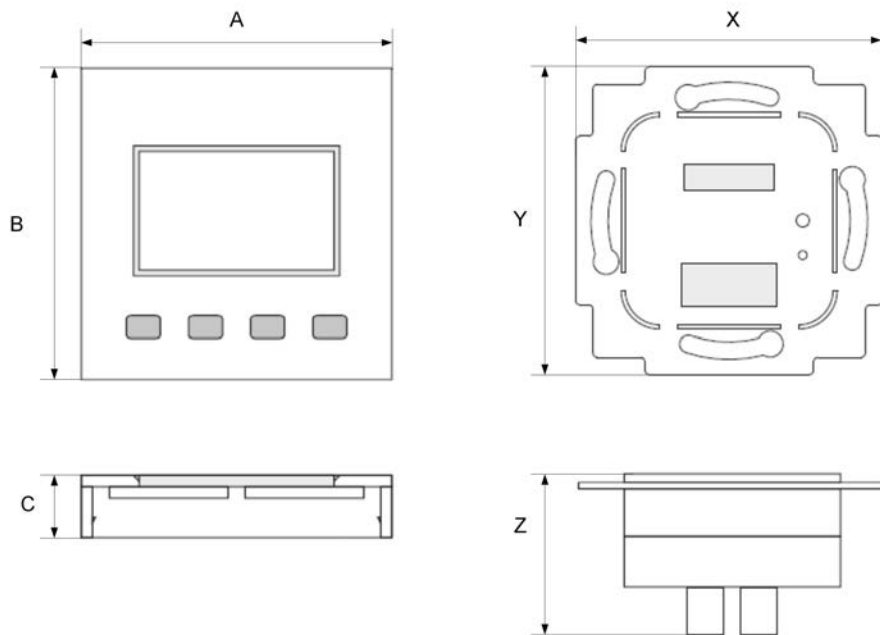
*The mounting plate of the Touchpoint Nano type Feller EDIZIO differs slightly from the picture.*

| Electrical | |
|---|---|
| Input voltage | 13.5 … 26.4 VDC |
| Supply current | 58 mA at 16 VDC (power supply from a Comforte base module) |
| | 40 mA at 24 VDC (power from a Roombus power supply module) |

| Measurements | |
|---|---|
| Temperature | |
| Measurement range | 0 … 50ºC (32 … 122°F) |
| Accuracy at 21°C [1] | ± 0.5ºC |
| Resolution | 0.1ºC |
| Measurement interval | 1 s |

[1] On account of automatic calibration, the accuracy only applies after the Touchpoint Nano has been operational for a minimum of 3 hours.

| Digital inputs | |
|---|---|
| Number | 4 |
| Maximum cable length | 3 m |
| Usage | voltage-free contact to GND |
| Internal pull-up resistance | 4.7 kOhm |
| Nominal voltage on input without load | 5 VDC |
| Minimum high input voltage with open contact | 3 VDC |
| Maximum low input voltage with closed contact | 1 VDC |
| Minimum resistance with open contact | 8 kOhm |
| Maximum resistance with closed contact | 1 kOhm |
| Nominal sampling time | 100 ms |

| Display and operation | |
|---|---|
| Display | LCD (34 x 21 mm) |
| | black and white, with language-independent icons |
| Operation | via buttons (functions configurable) |
| Number of buttons | 4 |
| | various buttons for type 1 and type 2 |

| Connections | |
|---|---|
| Type of connector | two 5-pole plug-in screw connectors:<br>• 1 plug-in screw connector for power supply and Roombus<br>• 1 plug-in screw connector for digital inputs |
| Cable type | twisted pair, shielded or unshielded |
| Communication interface | RS-485 |
| Communication protocol | Modbus RTU |
| Transmission speeds (adjustable with DIP switch) | 9600, 19200, 57600 or 115200 baud<br>default setting: 115200 baud |
| Bus load | < 1/4 Unit Load |
| Other parameters | number of data bits: 8<br>parity: none, even, odd (adjustable with DIP switch, default setting: even)<br>number of stop bits: 1 stop bit for even/odd parity, 2 stop bits for no parity<br>(default setting: 1 stop bit) |
| Cross section | 0.08 – 1.5 mm² (without ferrule connector)<br>0.08 – 0.5 mm² (with ferrule connector) |
| Strip length / connector length | 6 mm |

| Housing | |
|---|---|
| Material | base: ABS<br>housing: PC<br>buttons: TPE-V |
| IP code | IP30 (IEC 60529) |
| Flammability class | V0 |
| Recycle code | 7 |
| Colour | base: black<br>front: pure white<br>buttons: grey |

| Environment | |
|---|---|
| Permissible ambient temperature during use | 0 ... 50ºC (32 ... 122°F) |
| Permitted temperature during transport and storage | -10 ... 50ºC (14 ... 122°F) |
| Permissible ambient relative humidity | maximum 85% (non-condensing) |
| Degree of pollution | 2 |
| Installation category | II |

| Regulations and standards | | |
|---|---|---|
| Europe | CE | • Low Voltage Directive (2014/35/EU):<br>  • EN 60730-1 (automatic electrical controls)<br>• EMC Directive 2014/30/EU:<br>  • EN 60730-1 (automatic electrical controls)<br>  • EN 61000-6-1 (generic immunity standard)<br>  • EN 61000-6-3 (generic emission standard)<br>• RoHS Directive 2011/65/EU:<br>  • EN 50581 (restriction of hazardous substances) |
| | | in compliance with WEEE directive 2012/19/EU |

## Addressing

| Addressing | |
|---|---|
| Structure of address | fixed address offset + adjustable address section |
| Fixed address offset | 16 |
| Adjustable address section | 0 ... 15 |
| Available address range | 16 ... 31 |

PRIVA
CREATING A CLIMATE FOR GROWTH

## DIP-switches



| Label | Description | Example |
|---|---|---|
| 1 | device address (bit 0, LS bit) | **1 - 2 - 3 - 4** |
| 2 | device address (bit 1) | address offset + 0 - 0 - 0 - 0 = 16 (default setting) |
| 3 | device address (bit 2) | address offset + 1 - 0 - 0 - 0 = 17 |
| 4 | device address (bit 3) | address offset + 1 - 1 - 1 - 0 = 23 |
| | | address offset + 1 - 1 - 1 - 1 = 31 |
| 5 | not used, must always be '1' | - |



| Label | Description | Example |
|---|---|---|
| 1 | not used, must always be '0' | |
| 2 | baud rate | **2 - 3** |
| 3 | | 0 - 0 = 9600 baud |
| | | 0 - 1 = 57600 baud |
| | | 1 - 0 = 19200 baud |
| | | 1 - 1 = 115200 baud (default setting) |
| 4 | parity | **4 - 5** |
| 5 | | 0 - 0 = none |
| | | 0 - 1 = odd |
| | | 1 - 0 = even (default setting) |
| | | 1 - 1 = even |
| 6 | not used, must always be '0' | |

## Connection specifications

| Description | Touchpoint Nano connector | Roombus connector |
|---|---|---|
| | Plug-in screw connector | RJ45 connector |
| |  |  |
| + of power supply | pin 5: V+ | pin 1 (orange/white) |
| GND of power supply and RS485 | pin 4: 0 | pin 2 (orange) |
| RS485-A | pin 3: A | pin 3 (green/white) |
| RS485-B | pin 2: B | pin 6 (green) |
| GND for digital inputs | pin 10: GND | N/A |
| digital input D4 ... D1 | pin 6 ... 9: D4 ... D1 | N/A |
| GND, not used | pin 1: | N/A |