# **Nextion Intelligent NX4827P043-011R 4.3″ HMI Resistive Touch Display**

**SKU: 983171**

### NX4827P043-011R

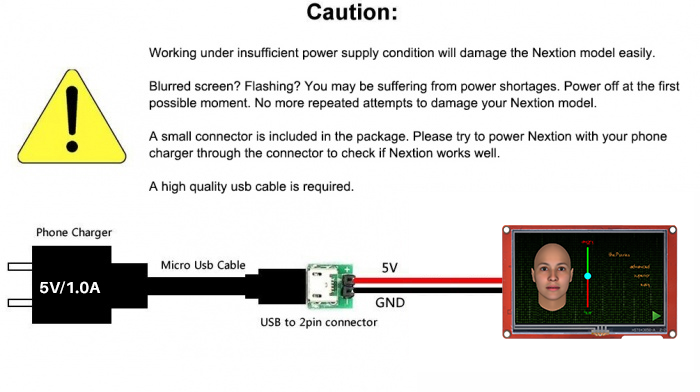
* [Overview](https://nextion.tech/datasheets/nx4827p043-011r/#1)
* [Nextion Models](https://nextion.tech/datasheets/nx4827p043-011r/#2)
* [Specifications](https://nextion.tech/datasheets/nx4827p043-011r/#3)
* [Electronic Characteristics](https://nextion.tech/datasheets/nx4827p043-011r/#4)
* [Working Environment & Reliability Parameter](https://nextion.tech/datasheets/nx4827p043-011r/#5)
* [Interfaces Performance](https://nextion.tech/datasheets/nx4827p043-011r/#6)
* [Memory Features](https://nextion.tech/datasheets/nx4827p043-011r/#7)
* [Product Dimensions](https://nextion.tech/datasheets/nx4827p043-011r/#8)

#### **Overview**

Nextion is a Human Machine Interface （HMI） solution combining an onboard processor and memory touch display with Nextion Editor software for HMI GUI project development. Using the NEXTION Editor software, you can quickly develop the HMI GUI by drag-and-drop components (graphics, text, button, slider etc.) and ASCII text-based instructions for coding how components interact at the display side. Nextion HMI display connects to peripheral MCU via TTL Serial (5V, TX, RX ,GND) to provide event notifications that peripheral MCU can act on, the peripheral MCU can easily update progress and status back to Nextion display utilizing simple ASCII text-based instructions.

The Intelligent Series products have more powerful hardware in terms of MCU, Flash storage and SRAM compared with Basic Series and Enhanced Series. What’s more and new? The audio, video and animation play functions enrich user’s project HMI interaction. The Intelligent Series supports advanced software features and functions such as transparent components, page loading effect, component Move and Drag .etc.

**Package include:** Nextion NX4827P043-011R HMI Display\*1, XH2.54 4P wire\*1, power supply test board\*1.  
Note: the small power supply test board and connecting wire inside the package allow you to test if the electrical supply is enough or not. See the image below on how to use it.



#### **Nextion Models**

|  |  |
| --- | --- |
| Nextion Type | Intelligent Series |
| Nextion Models | NX4827P043-011R (4.3 inch resistive touchscreen without enclosure) |

#### **Specifications**

|  |  |  |
| --- | --- | --- |
|  | Data | Description |
| Color | 65K 65536 colors | 16 bit 565, 5R-6G-5B |
| Layout size | 120mm(L)×74mm(W)×6.2mm(H) | NX4827P043-011R |
| Active Area (A.A.) | 105.50mm(L)×67.20mm(W) |  |
| Visual Area (V.A.) | 95.04mm(L)×53.86mm(W) |  |
| Resolution | 480×272 pixel | Also can be set as 272×480 |
| Touch type | Resistive |  |
| Touches | > 1 million |  |
| Backlight | LED |  |
| Backlight lifetime (Average) | >30,000 Hours |  |
| Brightness | 300nit | 0% to 100%, the interval of adjustment is 1% |
| Weight | 98g |  |

#### **Electronic Characteristics**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Test Conditions | Min | Typical | Max | Unit |
| Operating Voltage |  | 4.65 | 5 | 6.5 | V |
| Operating Current | VCC=+5V, Brightness is 100% | – | 220 | – | mA |
| SLEEP Mode | – | 170 | – | mA |
| Power supply recommend：**5V, 1.0A, DC** | | | | | |

#### **Working Environment & Reliability Parameter**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Test Conditions | Min | Typical | Max | Unit |
| Working Temperature | 5V, Humidity 60% | -20 | 25 | 70 | °C |
| Storage Temperature |  | -30 | 25 | 85 | °C |
| Working Humidity | 25°C | 10% | 60% | 90% | RH |

#### **Interfaces Performance**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Test Conditions | Min | Typical | Max | Unit |
| Serial Port Baudrate | Standard | 2400 | 9600 | 921600 | bps |
| Output High Voltage (TXD) | IOH=1mA | 3.0 | 5.0 | Vin | V |
| Output Low Voltage(TXD) | IOL=-1mA |  | 0.1 | 0.2 | V |
| Input High Voltage(RXD) |  | 3.0 | 5.0 | Vin | V |
| Input Low Voltage(RXD) |  | -0.7 | 0.0 | 1.3 | V |
| Serial Port Mode | 3.3V/5.0V TTL | | | | |
| Serial Port | 4Pin\_2.54mm | | | | |
| USB interface | NO | | | | |
| SD card socket | Yes (FAT32 format), support maximum 32G Micro SD Card \* presence of \*.tft file on microSD: socket is exclusive to upgrade Nextion firmware/HMI design \* Intelligent Series only: see Instruction Set / Editor Guide for microSD card runtime usage | | | | |
| Extended IO | 8 Digital extended GPIO | | | | |
| IO0-IO7 support input, output and component binding event \* IO pin / ports are not exclusive, limit current draw to 1mA recommended | | | | |
| IO6-IO7 support PWM | | | | |
| RTC | built-in RTC support (Battery type: CR1220) | | | | |

Vin: the input voltage of power supply

#### **Memory Features**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Memory Type | Test Conditions | Min | Typical | Max | Unit |
| FLASH Memory | Store fonts and images |  |  | 120 | MB |
| User Storage | EEPROM |  |  | 1024 | BYTE |
| RAM Memory | Store variables |  |  | 512 | KB |
| Instruction Buffer | Instruction Buffer |  |  | 4096 | BYTE |

#### **Audio Features**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Speaker | Parameter | Min | Typical | Max | Unit |
| Power | – | 0.5 | – | 1.5 | W |
| Audio Connector Type：1.25T-2-2A (1.25mm pitch 2-pin housing) | | | | | |

#### \* NX4827P043-011R do not have speaker in the package.

#### Product Dimensions

[NX4827P043-011R\_Dimension](https://cdn.nextion.tech/wp-content/uploads/2022/03/NX4827P043-011R_dimension.pdf)

#### Product Certificates

[CE-EMC](https://cdn.nextion.tech/wp-content/uploads/2021/02/RDG201224014%E2%80%9001_EN-55032%EF%BC%9A2020-EN-55035%EF%BC%9A2020-EN-61000-3-2%EF%BC%9A2014-EN-61000-3-3%EF%BC%9A2019-EMC-Final-Report.pdf), [RoHS](https://cdn.nextion.tech/wp-content/uploads/2021/02/DG1201224-28599E.pdf)