



## OVERVIEW

Summary	A smart display solution, <b>mikromedia HMI 4.3"</b> has a high-brightness <b>480x272px</b> color display on the front, and a powerful <b>FT900Q</b> 32-bit MCU with additional essential circuitry on the back - making it a standalone but cost-effective solution suitable for industrial applications.
MCU	mikromedia HMI boards are driven by <b>FTDI Chip's FT900Q</b> with their proprietary <b>32-bit RISC core</b> with industry-leading performance. With execution from shadow memory, the MCU can achieve speeds of <b>3.1 DMIPS/MHz at 100 MHz</b> . FT900Q has 256KB of Flash memory, a small part of which is taken by the <b>built-in bootloader</b> .
Additional circuitry	<p>The concept of mikromedia HMI is to keep only the essential components that simplify its integration into a final product, whilst keeping overall costs down.</p> <p>The board integrates a <b>microSD card</b> for expanding storage capacity, a <b>haptic feedback motor</b>, small <b>audio speaker</b>, and a <b>micro USB connector</b>. A connector for interfacing the MCU with external electronics, along with a separate connector for FT900Q's <b>parallel camera interface</b>.</p>
Display	mikromedia for HMI 4.3" Res has a high-quality <b>Riverdi display</b> with <b>16.7M color depth</b> and <b>550 NIT brightness</b> . The display is driven by a <b>FT812 graphic controller</b> . A <b>mounting frame</b> surrounding the screen simplifies integration.



## KEY FEATURES

- **Size:** 4.3"
- **Resolution:** 480x272
- **Brightness:** 550
- **MCU:** FT900Q
  - Speed:** 100MHz; 310 DMIPS
  - Memory:** 256 KB Flash
  - Peripherals include:** 2xCAN, 2xSPI, 2xI2C, I2S, UART
- **Graphic controller:** FT812
- **Touchscreen:** None
- **Interface:** Main connector, Camera connector, Micro USB
- **Storage:** 8MB Flash + MicroSD card slot
- **Audio speaker**
- **Haptic feedback engine**
- **Mounting frame**



## COMPARISON CHART

See how **mikromedia HMI 4.3"** compares with the rest of the product line.

Product Name	Size	Resolution	Touch Panel	Luminosity	Active Area	Graphics Controller	Haptic Feedback	Dot Pitch (mm2)
mikromedia HMI 3.5"	3.5"	320 x 240	None	540	70.08 x 52.56	FT812	No	0.73 x 0.219
mikromedia HMI 3.5" Res	3.5"	320 x 240	Resistive	450	70.08 x 52.56	FT812	No	0.73 x 0.219
mikromedia HMI 3.5" Cap	3.5"	320 x 240	Capacitive	480	70.08 x 52.56	FT813	No	0.73 x 0.219
<b>mikromedia HMI 4.3"</b>	<b>4.3"</b>	<b>480 x 272</b>	<b>None</b>	<b>550</b>	<b>95.04 x 53.86</b>	<b>FT812</b>	<b>Yes</b>	<b>0.066 x 0.198</b>
mikromedia HMI 4.3" Res	4.3"	480 x 272	Resistive	440	95.04 x 53.86	FT812	Yes	0.066 x 0.198
mikromedia HMI 4.3" Cap	4.3"	480 x 272	Capacitive	500	95.04 x 53.86	FT813	Yes	0.066 x 0.198
mikromedia HMI 4.3" UXB	4.3"	480 x 272	Capacitive, UX Black	500	95.04 x 53.86	FT813	Yes	0.066 x 0.198
mikromedia HMI 4.3" UXW	4.3"	480 x 272	Capacitive, UX White	500	95.04 x 53.86	FT813	Yes	0.066 x 0.198
mikromedia HMI 5"	5.0"	800 x 480	None	600	118.00 x 64.80	FT812	Yes	0.045 x 0.135
mikromedia HMI 5" Res	5.0"	800 x 480	Resistive	480	118.00 x 64.80	FT812	Yes	0.045 x 0.135
mikromedia HMI 5" Cap	5.0"	800 x 480	Capacitive	510	118.00 x 64.80	FT813	Yes	0.045 x 0.135
mikromedia HMI 5" UXB	5.0"	800 x 480	Capacitive, UX Black	510	118.00 x 64.80	FT813	Yes	0.045 x 0.135
mikromedia HMI 5" UXW	5.0"	800 x 480	Capacitive, UX White	510	118.00 x 64.80	FT813	Yes	0.045 x 0.135
mikromedia HMI 7"	7.0"	800 x 480	None	400	154.08 x 85.92	FT812	Yes	0.045 x 0.135
mikromedia HMI 7" Res	7.0"	800 x 480	Resistive	320	154.08 x 85.92	FT812	Yes	0.045 x 0.135
mikromedia HMI 7" Cap	7.0"	800 x 480	Capacitive	350	154.08 x 85.92	FT813	Yes	0.045 x 0.135

mikromedia HMI 7" UXB	7.0"	800 x 480	Capacitive UX Black	350	154.08 x 85.92	FT813	Yes	0.045 x 0.135
mikromedia HMI 7" UXW	7.0"	800 x 480	Capacitive UX White	350	154.08 x 85.92	FT813	Yes	0.045 x 0.135