

# NEC AccuSync™ Series

17"-23" flat-panel monitors ideal for small-to-medium-sized business users



**High-quality LCD monitors don't necessarily have to be associated with high-end price tags.** NEC AccuSync Series monitors have set a new standard in value for the flat-panel monitor category, offering you a perfect opportunity to take advantage of the many benefits offered by the latest display technology without having to break your budget. The 17" NEC AccuSync AS171, 19" AS192, and widescreen 19" AS191WM, 22" AS221WM and 23" AS231WM deliver eco-friendly, technology-rich and cost-conscious display solutions to small-to-medium-sized businesses and home office users. The widescreen models increase productivity by expanding your working area to simultaneously view multiple application windows.

**It's easy to be green.** The AccuSync Series is loaded with features that promote environmental consciousness. Eco-friendly benefits include ECO Mode™, auto brightness, Intelligent Power Manager (IPM) and an off timer for further energy savings, a resettable carbon footprint meter for tracking the conservation of green gas emissions, and a significant reduction in packaging materials. The AS192 sets the bar for "green" technology by using LED backlighting, which is more energy-efficient. Compared to its predecessor, this model consumes 21% less power overall, weighs 18% less, radiates less heat, uses less packaging, utilizes recycled plastics in its production and is free of hazardous materials such as mercury, halogen and arsenic.

## Series Features and Benefits

**LED backlight technology** provides for industry-leading low power consumption and less hazardous materials (AS192)

**Energy efficiency** is optimized as a result of the display's "green" technology

**ECO Mode** allows you to manually adjust the display's brightness to two preset settings, saving more power and reducing your energy costs

**Intelligent Power Manager (IPM) system** shifts the monitor to a lower power consumption level or automatically powers it down when it is on but not in use

**Carbon footprint meter** helps track and calculate the savings of green gas emissions

**EPEAT Silver compliance** ensures the displays reduce hazardous waste and electricity usage, resulting in lower energy costs and increased protection for the environment

**ENERGY STAR® 5.0 and TCO 5.1 qualifications** reduce electrical costs and lowers total cost of ownership

**Ambix® dual-input technology** allows for digital/analog compatibility with upgraded video cards and software as well as connection to two systems

**Touch integration-enabling design** increases application options (AS191WM, AS221WM & AS231WM)

**Built-in multimedia speakers** provide sound for business applications such as conferencing (AS191WM, AS221WM & AS231WM)

**NaViSet™** software (available via download) offers an expanded and intuitive interface, allowing you to more easily adjust display settings via mouse and keyboard

**Rapid Response™ technology** delivers virtually uninterrupted, undistorted viewing of high-speed, full-motion video

**NEC Display Solutions' quality and reliability** provide peace of mind with a 3-year limited parts and labor warranty (including backlight) and unrivaled customer service and technical support

Model	AccuSync AS171	AccuSync AS192	AccuSync AS191WM	AccuSync AS221WM	AccuSync AS231WM
<b>Display</b>					
Viewable Image Size	17"	19"	19" widescreen	22" widescreen	23" widescreen
Pixel Pitch	0.264mm	0.294mm	0.284mm	0.282mm	0.265mm
Pixels Per Inch	96 @ native resolution	86 @ native resolution	90 @ native resolution	90 @ native resolution	96 @ native resolution
Brightness (typical)	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>	250 cd/m <sup>2</sup>
Contrast Ratio (typical)	1000:1	1000:1	1000:1	1000:1	1000:1
Viewing Angle (typical)	85°/85°/85°/85° (CR > 10)	75°/85°/80°/80° (CR > 5)	88°/88°/88°/88° (CR > 5)	88°/88°/88°/88° (CR > 5)	85°/85°/88°/88° (CR > 5)
Response Time (typical)	5ms	5ms	5ms	5ms	5ms
Display Colors	More than 16.7million	More than 16.7million	More than 16.7million	More than 16.7million	More than 16.7million
<b>Synchronization Range</b>					
Horizontal	31.5-81.1 KHz	31.5-81.1 KHz	31.5-81.1 KHz	31.5-82.3 KHz	31.5-82.3 KHz
Vertical	56 - 76 Hz	56 - 76 Hz	56 - 75 Hz	56 - 75 Hz	56 - 75 Hz
<b>Inputs</b>	VGA, DVI-D	VGA, DVI-D	VGA, DVI-D	VGA, DVI-D	VGA, DVI-D
<b>Resolutions Supported</b>	720 x 400 @ 70 Hz 640 x 480 @ 60-75 Hz 800 x 600 @ 56-75 Hz 832 x 624 @ 75 Hz 1024 x 768 @ 60-75 Hz 1152 x 864 @ 75 Hz 1152 x 870 @ 75 Hz 1280 x 960 @ 60-75 Hz 1280 x 1024 @ 60-75 Hz	720 x 400 @ 70 Hz 640 x 480 @ 60-75 Hz 800 x 600 @ 56-75 Hz 832 x 624 @ 75 Hz 1024 x 768 @ 60-75 Hz 1152 x 864 @ 75 Hz 1152 x 870 @ 75 Hz 1280 x 960 @ 60-75 Hz 1280 x 1024 @ 60-75 Hz	720 x 350 @ 70 Hz 720 x 400 @ 70 Hz 640 x 480 @ 60-75 Hz 800 x 600 @ 56-75 Hz 800 x 600 @ 56-75 Hz 1024 x 768 @ 60-75 Hz 1024 x 768 @ 75 Hz 1152 x 864 @ 75 Hz 1152 x 870 @ 75 Hz 1280 x 720 @ 60 Hz 1280 x 768 @ 60 Hz 1280 x 960 @ 60 Hz 1280 x 960 @ 75 Hz 1280 x 1024 @ 60-75 Hz 1360 x 768 @ 60 Hz 1440 x 900 @ 60-75 Hz	720 x 350 @ 70 Hz 720 x 400 @ 70 Hz 640 x 480 @ 60-75 Hz 640 x 480 @ 66 Hz 800 x 600 @ 56-75 Hz 1024 x 768 @ 60-75 Hz 1024 x 768 @ 75 Hz 1152 x 864 @ 75 Hz 1152 x 870 @ 75 Hz 1280 x 720 @ 60 Hz 1280 x 768 @ 60-75 Hz 1280 x 960 @ 60 Hz 1280 x 960 @ 75 Hz 1280 x 1024 @ 60-75 Hz 1360 x 768 @ 60 Hz 1440 x 900 @ 60-75 Hz 1400 x 1050 @ 60-75 Hz 1680 x 1050 @ 60 Hz	720 x 350 @ 70 Hz 720 x 400 @ 70 Hz 640 x 480 @ 60-75 Hz 640 x 480 @ 66 Hz 800 x 600 @ 56-75 Hz 832 x 600 @ 56-75 Hz 1024 x 768 @ 60-75 Hz 1024 x 768 @ 75 Hz 1152 x 864 @ 75 Hz 1152 x 870 @ 75 Hz 1280 x 720 @ 60 Hz 1280 x 768 @ 60-75 Hz 1280 x 960 @ 60 Hz 1280 x 960 @ 60 Hz 1280 x 1024 @ 60-75 Hz 1360 x 768 @ 60 Hz 1440 x 900 @ 60-75 Hz 1400 x 1050 @ 60-75 Hz 1680 x 1050 @ 60 Hz 1920 x 1080 @ 60 Hz
<b>Native Resolution</b>	1280 x 1024	1280 x 1024	1440 x 900	1680 x 1050	1920 x 1080
<b>Additional Features</b>	Tilt, push-button release stand, 2-step ECO Mode (ECO Mode 1&2), carbon footprint meter, cable management, sRGB, digital smoothing, 5-preset AccuColor control, No Touch Auto Adjust, DDC/CI, NaViSet software, Plug and Play (VESA DDC 1/2B), VESA DPMS power management, VESA mount, OSD user control	Tilt, one-touch ECO Mode key, carbon footprint meter, cable management, sRGB, digital smoothing, 5-preset AccuColor control, No Touch Auto Adjust, DDC/CI, NaViSet software, Plug and Play (VESA DDC 1/2B), VESA DPMS power management, VESA mount, OSD user control	Tilt, 2-step ECO Mode (ECO Mode 1&2), carbon footprint meter, cable management, DVI-D with HDCP, sRGB, digital smoothing, 5-preset AccuColor control, No Touch Auto Adjust, DDC/CI, NaViSet software, Plug and Play (VESA DDC 1/2B), VESA DPMS power management, VESA mount, OSD user control	Tilt, 2-step ECO Mode (ECO Mode 1&2), carbon footprint meter, cable management, DVI-D with HDCP, sRGB, digital smoothing, 5-preset AccuColor control, No Touch Auto Adjust, DDC/CI, NaViSet software, Plug and Play (VESA DDC 1/2B), VESA DPMS power management, VESA mount, OSD user control	Tilt, 2-step ECO Mode (ECO Mode 1&2), touch-integratable, carbon footprint meter, cable management, DVI-D with HDCP, sRGB, digital smoothing, 5-preset AccuColor control, No Touch Auto Adjust, DDC/CI, NaViSet software, Plug and Play (VESA DDC 1/2B), VESA DPMS power management, VESA mount, OSD user control
<b>Regulatories and Compliance</b>	UL /C-UL or CSA, PCT (Gost), C-tick, FCC Class B/Canadian DOC, MPR II / MPR III, PSB, NOM, Windows Vista, TUV GS, TUV Ergonomie, CE, GEEA/ Energy label, SASO, ISO 9241-307, Pb free, RoHS, EPEAT Silver, ENERGY STAR 5.0 and TCO 5.0 compliant, Windows 7	UL /C-UL or CSA, PCT (Gost), C-tick, FCC Class B/Canadian DOC, MPR II / MPR III, PSB, NOM, Windows Vista, TUV GS, TUV Ergonomie, CE, GEEA/ Energy label, SASO, ISO 9241-307, Pb free, RoHS, EPEAT Silver, ENERGY STAR 5.0 and TCO 5.1 compliant, Windows 7	UL /C-UL or CSA, PCT (Gost), C-tick, SB-50 (California), FCC Class B/Canadian DOC, MPR II / MPR III, PSB, NOM, Windows Vista, TUV GS, TUV Ergonomie, CE, GEEA/ Energy label, SASO, ISO 9241-307, Pb free, RoHS, EPEAT Silver, ENERGY STAR 5.0 and TCO 5.0 compliant, Windows 7	UL /C-UL or CSA, PCT (Gost), C-tick, SB-50 (California), FCC Class B/Canadian DOC, MPR II / MPR III, PSB, NOM, Windows Vista, TUV GS, TUV Ergonomie, CE, GEEA/ Energy label, SASO, ISO 9241-307, Pb free, RoHS, EPEAT Silver, ENERGY STAR 5.0 and TCO 5.0 compliant, Windows 7	UL /C-UL or CSA, PCT (Gost), C-tick, SB-50 (California), FCC Class B/Canadian DOC, MPR II / MPR III, PSB, NOM, Windows Vista, TUV GS, TUV Ergonomie, CE, GEEA/ Energy label, SASO, ISO 9241-307, Pb free, RoHS, EPEAT Silver, ENERGY STAR 5.0 and TCO 5.0 compliant, Windows 7
<b>Touch-Capable</b>	No	No	Yes	Yes	Yes
<b>Voltage Rating</b>	AC100-120V / AC 220-240V	AC100-120V / AC 220-240V	AC100-120V / AC 220-240V	AC100-120V / AC 220-240V	AC100-120V / AC 220-240V
<b>Power Consumption (typical)</b>					
On	21W	19W	21W	24W	25W
ECO Mode 1/2	18W / 14W	TBD	18W / 15W	21W / 17W	22W / 18W
Power Savings Mode	0.40W	0.15W	0.4W	0.42W	0.42W
<b>Dimensions (W x H x D)</b>					
Net (with stand)	14.7 x 14.7 x 8.1 in. / 373.2 x 373.1 x 205.1mm	16.2 x 15.9 x 8.1 in. / 412.5 x 403.1 x 205.1mm	17.3 x 13.7 x 8.3 in. / 439.4 x 347.1 x 209.8mm	19.9 x 15.4 x 8.7 in. / 505.2 x 390.9 x 221.8mm	21.5 x 14.9 x 8.7 in. / 546 x 378.6 x 221.8mm
Net (without stand)	14.7 x 12.2 x 2.5 in. / 373.2 x 310.2 x 69mm	16.2 x 13.4 x 2.7 in. / 412.5 x 341.2 x 69mm	17.3 x 11.8 x 2.5 in. / 439.4 x 299.8 x 64.6mm	19.9 x 13.5 x 2.6 in. / 505.2 x 342.9 x 65.2mm	21.5 x 13.1 x 2.6 in. / 546 x 334 x 65.2mm
<b>Weight</b>					
Net (with stand)	8.6 lbs. / 3.9 kg	7.5 lbs. / 3.4 kg	9.7 lbs. / 4.4 kg	11 lbs. / 5 kg	11.9 lbs. / 5.4 kg
Net (without stand)	7.7 lbs. / 3.5 kg	6.6 lbs. / 3 kg	9 lbs. / 4.1 kg	10.4 lbs. / 4.7 kg	11 lbs. / 5 kg
<b>VESA Hole Configuration Specifications</b>	100 x 100mm	100 x 100mm	100 x 100mm	100 x 100mm	100 x 100mm
<b>Environmental Conditions</b>					
Operating Temperature	5-35°C / 41-95°F	5-35°C / 41-95°F	5-35°C / 41-95°F	5-35°C / 41-95°F	5-35°C / 41-95°F
Operating Humidity	20-80%	20-80%	20-80%	20-80%	20-80%
Operating Altitude	2000m / 6562 ft.	2000m / 6562 ft.	2000m / 6562 ft.	2000m / 6562 ft.	2000m / 6562 ft.
Storage Temperature	-10-60°C / 14-140°F	-10-60°C / 14-140°F	-10-60°C / 14-140°F	-10-60°C / 14-140°F	-10-60°C / 14-140°F
Storage Humidity	10-85%	10-85%	10-85%	10-85%	10-85%
Storage Altitude	12,192m / 40,000ft	12,192m / 40,000ft	12,192m / 40,000 ft.	12,192m / 40,000 ft.	12,192m / 40,000 ft.
<b>Limited Warranty</b>	3 year parts and labor, including backlight	3 year parts and labor, including backlight	3 year parts and labor, including backlight	3 year parts and labor, including backlight	3 year parts and labor, including backlight
<b>Technical Support</b>	M - F (7am - 7pm CST)	M - F (7am - 7pm CST)	M - F (7am - 7pm CST)	M - F (7am - 7pm CST)	M - F (7am - 7pm CST)



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