

21.5" FULL HD LED BACKLIT TFT DISPLAY WITH NVIS CLASS B CAPABILITY

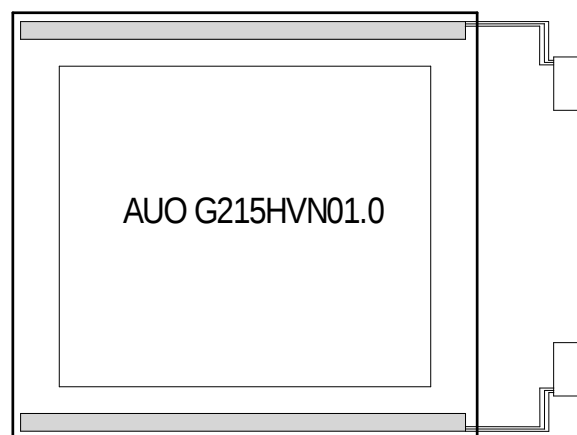
GENERAL DESCRIPTION

The ACD-2635 consists of the AUO G215HVN01.0 TFT display modified with a high performance LED backlight capable of Day and NVIS Class B operation.

Performance at given brightness levels

1000 cd/m² with 47.7 watts LED power (Day)

8 cd/m² with 13.8 watts LED power (NVIS)



LED BACKLIGHT FEATURES

Day and NVIS LED edge-light rail

Three wire connection (Typically 11 inches long), allows simple interconnect with LED driver¹

Projected lifetime > 75,000 hours

5000:1 or better dimming ratio (Day)¹

¹ For best power transfer and control, use two of the following LED drivers:
ACI ID5 Dual Mode (ACI-2634) or
ACI-3043 (Conformal Coated with Humiseal 1B73)

LCD PANEL HIGHLIGHTS

21.5" TFT Active Matrix Color

476.64 (H)mm x 268.11 (V)mm viewable area

Full HD 1920 x 1080 pixels, 16.2 M colors

5000:1 typical contrast ratio

Display Mode Normally Black

Physical Size 495.6(W)mm x 292.2(H)mm x 16.4(D)mm

For complete LCD specification (standard panel), refer to the AUO G215HVN01.0 datasheet

MAXIMUM RATINGS *

Symbol	Parameter	Value	Unit
Top ¹	Operating temperature of display (center of panel surface)	0 to +60	Deg-C
Tled	Operating temperature of LED edge light (light rail contact)	-30 to +85	Deg-C
Tstg ¹	Display storage temperature	-20 to +60	Deg-C
Ifwd	LED forward current (Day)	80	mA
Ifwd	LED forward current (NVIS)	30	mA

*Maximum Ratings are those values beyond which damage may occur

1 Per Manufacturer's Specification

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd(Day) = 66.25mA per bank, 4 banks per rail, 2 rails per display, Ifwd(NVIS) = 25mA per bank, 4 banks per rail, 2 rails per display, LED rails: ACR-2656 Ta = +25Deg-C, moving air (36.0 CFM) min 2hr soak

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Bpd	Panel Brightness (Day)		900	1000	1100	cd/m ²
Bpn	Panel Brightness (NVIS)		7	8	9	cd/m ²
Xd	White X coordinate (Day mode)			0.264		-
Yd	White Y coordinate (Day mode)			0.303		-
XN	White X coordinate (NVIS)			0.278		-
YN	White Y coordinate (NVIS)			0.721		-

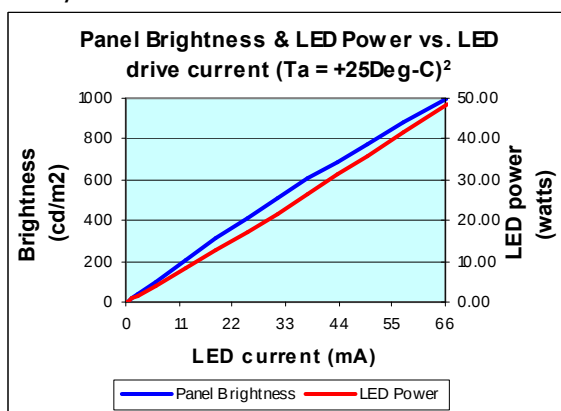
LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd(Day) = 66.25mA, Ifwd(NVIS) = 25mA, Top = +25Deg-C

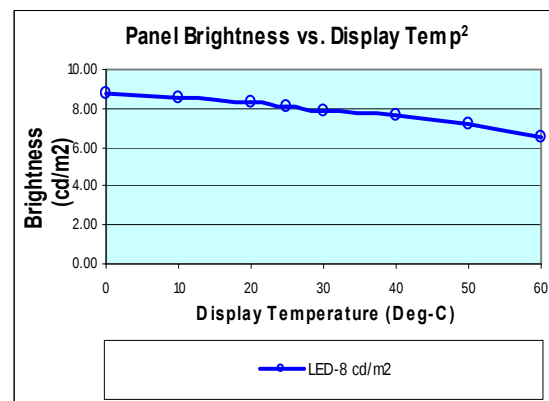
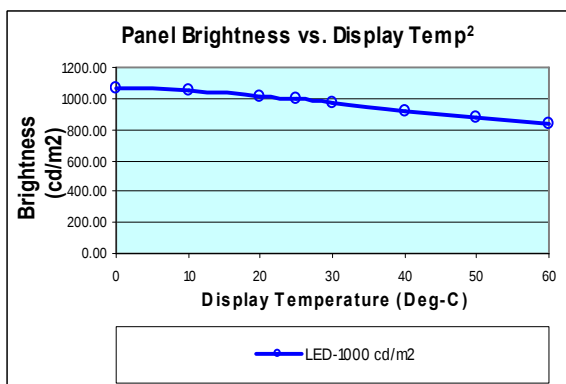
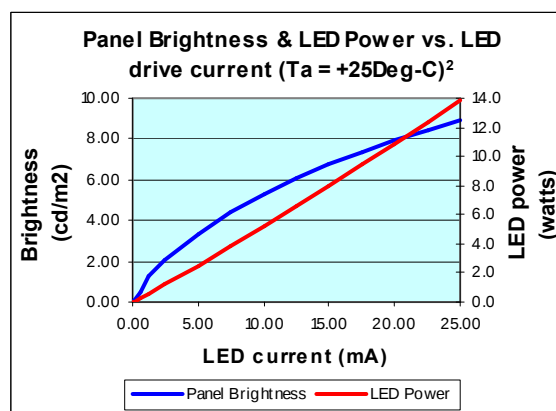
Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Vfwd	LED rail forward voltage drop (Day mode)		81	90	99	Vdc
Vfwd	LED rail forward voltage drop (NVIS)		62	69	76	Vdc

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

Day mode

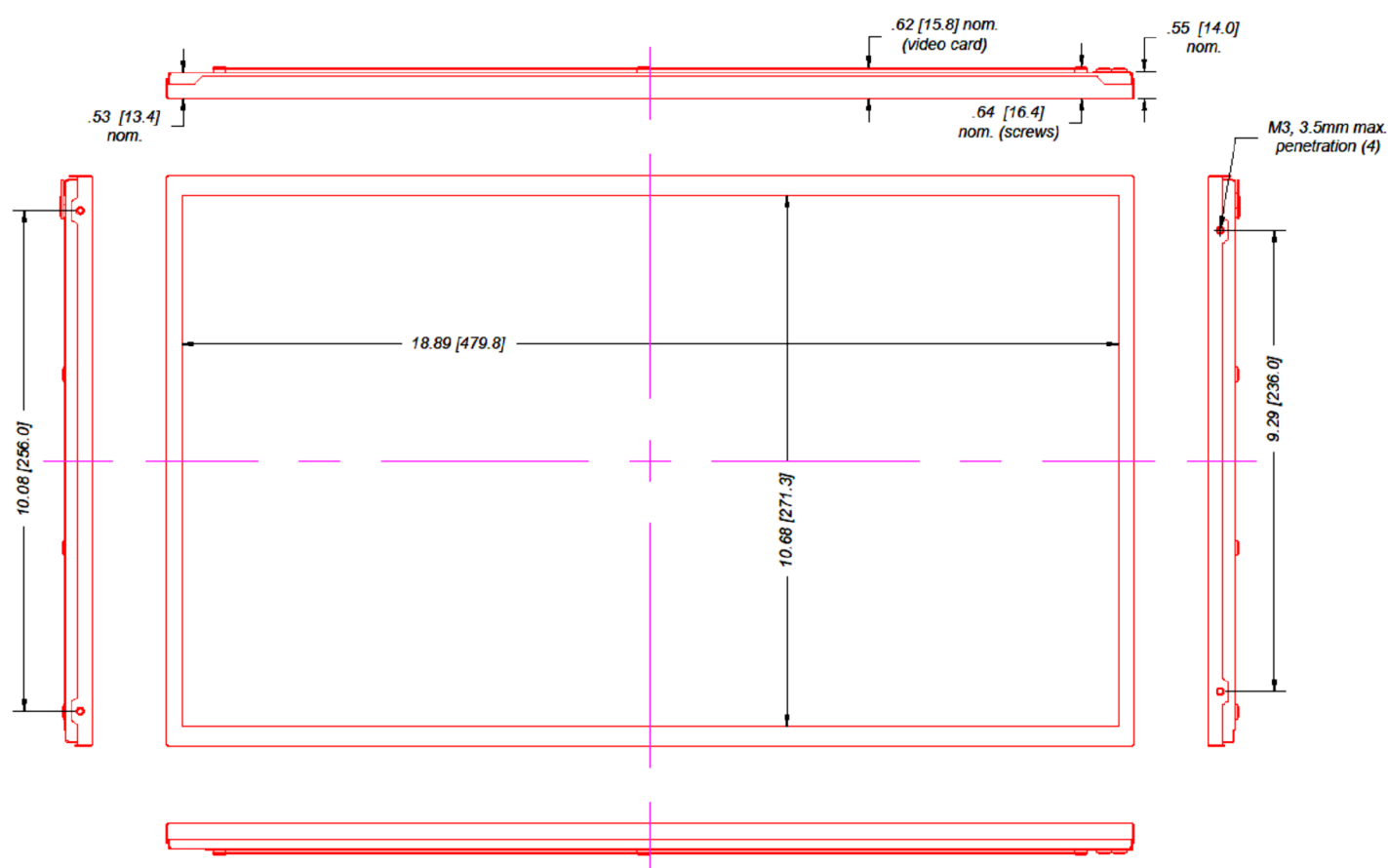


NVIS



² Moving air (36.0 CFM)

MECHANICAL CHARACTERISTICS (FRONT)



MECHANICAL CHARACTERISTICS (BACK)

