# Vanguard® VF-20X0-27x110-66-X

# Amber (A) and Full Color (RGB)

Display Technology High-intensity LED

Cabinet Access Walk-In
Cabinet Enclosure NEMA 3R

Face Panel Aluminum Mask over Polycarbonate Face Panel

Weight 3,530 LBS. (1,601 kg)

Dimensions 7' 11" H x 25'10" W x 4' 0" D (2.39 m x 7.87 m x 1.21 m)

Operating Temp. Range  $-40^{\circ}$  F to  $+140^{\circ}$  F ( $-40^{\circ}$  C to  $+60^{\circ}$  C)

Humidity Range 0 to 99%, Non-condensing

Ventilation Positive Pressure, Forced Air Ventilation
Controller Location Sign Cabinet or Equipment Cabinet
Display Type Full Matrix (Variable Text & Graphics)
Active Area 5' 11" H x 23'10" W (1.78 m x 6.93 m)

Top/Bottom Border Width 12" (304 mm) Left/Right Border Width 12" (304 mm)

Pixel Matrix 27 rows x 110 columns

Pixel Pitch 2.6" (66 mm)

Minimum Character Size 18" (460 mm) minimum

Viewing Distance 1,100' (335 m) using 18" characters (see note 3 below)

Sign Intensity Amber 9,200 candelas/m<sup>2</sup> minimum

Full Color 12,400 candelas/m<sup>2</sup> minimum (white)

LED Color Amber (591nm  $\pm$  4nm)

Full Color (32,000 distinct colors using red, green, and blue LEDs)

Power Requirements 120/240 VAC, single-phase power (3 wire plus ground)

Communications Protocol NTCIP

Communications Options Dial-up, Cellular, Fiber, Ethernet, Direct and Radio

Structural Design Standard AASHTO, Latest Edition

Welding Standard AWS D1.2

NEMA Standards NEMA TS 4 Section 2 Environmental Requirements

### **Model Specifications:**

Models	Viewing Angle (H x V)	Amber Amps Per Leg <sup>4</sup>	Amber Typical Power <sup>5</sup>	Full Color Maximum Power <sup>4</sup>	Full Color Typical Power <sup>5</sup>
VF-2000-27x110-66-X	15° x 15°	25	483 W	N/A	N/A
VF-2020-27x110-66-X	30° x 30°	25	669 W	6,743 W	2,656 W

## **Character Capacity:**

Number of Lines	Characters per Line	Character Height	Example Font Size	Interline Spacing
3	18	18"	7x5	3
2	13	29"	11x7	5



#### Notes:

- 1. Display cabinet depth dimensions include zee-extrusion mounting brackets on the rear of the cabinet. Contact Daktronics for specific mounting details.
- 2. Nominal character heights and number of lines that fit on each VMS are calculated using 7-pixel-high fonts. Many other font sizes are available. Contact Daktronics for details about other fonts.
- 3. The number of characters per line is calculated using a fixed 7-pixel-high by 5-pixel-wide font and one pixel separator between characters. Contact Daktronics for character capacity using other fonts.
- 4. Amps Per Leg numbers are based on maximum load of typical VMS, including a fully loaded 15A convenience outlet. Amps per leg value for 120/240 3W+G system. This number could vary depending on options installed in VMS, such as cabinet heaters, auxiliary control panels. Contact Daktronics for more information.
- 5. Typical Power includes a partially illuminated LED sign (with 15% pixels at 100% intensity), the sign controller and ventilation system.
- 6. Sign front face paint color is semi-gloss black. Other sides are mill finish aluminum.
- 7. Consistent with Daktronics continuous improvement program, all product features are subject to change without notice.

