

GRAPHIC TFT LCMs

| Display Format | P/N | SIZE | Outline Dimen. | Viewing Area | Interface | Touch Screen | Backlight LED |
|----------------|--------|-------|-----------------|---------------|-----------|--------------|---------------|
| 320 x 240 | AF35C | 3.5" | 93.5 x 66.44 | 73.1 x 55.6 | Digital | Y | • |
| | AF35F | 3.5" | 76.9 x 63.9 | 70.08 x 52.56 | Digital | Y | • |
| 480 x 272 | AF43C | 4.3" | 105.5 x 67.2 | 101.0 x 57.5 | Digital | Y | • |
| 320 x 240 | AF57B | 5.7" | 149.0 x 109.0 | 118.28 x 88.6 | Digital | Y | • |
| | AF57C | 5.7" | 143.5 x 104.1 | 118.6 x 88.9 | Digital | Y | • |
| | AF57D | 5.7" | 126.0 x 101.55 | 117.9 x 89.1 | Digital | Y | • |
| | AF57E | 5.7" | 141.12 x 101.55 | 117.9 x 89.1 | Digital | Y | • |
| 640 x 480 | AF57F | 5.7" | 125.0 x 98.8 | 117.5 x 88.7 | Digital | Y | • |
| 800 x 480 | AF70A | 7" | 165.0 x 104.44 | 155.3 x 94.3 | Digital | Y | • |
| | AF70D | 7" | 164.9 x 100 | | Digital | Y | • |
| | AF80B | 8" | 192.8 x 116.9 | 180.1 x 103.4 | Digital | Y | • |
| | AF102A | 10.2" | 235.0 x 145.8 | 225.3 x 135.7 | Digital | Y | • |
| 1024 x 768 | AF121A | 12.1" | 260.5 x 204.0 | 249.0 x 187.5 | Digital | N | • |

MORE SIZES AVAILABLE

TFT MODULE CODING SYSTEM



| 1 BRAND | 2 TYPE | 3 SIZE | 4 SERIALS | 5 BACKLIGHT | 6 POLARIZE TYPE | 7 MODULE TYPE | 8 RESOLUTION | 9 INTERFACE | 10 VERSION | 11 RoHS |
|--------------------|---------|--|-----------|---------------|---|---|---|--|------------|----------------|
| A - Aplus Products | F - TFT | 35 - 3.5" 43 - 4.3" 57 - 5.7" 70 - 7.0" 80 - 8.0" 102 - 10.2" | A-Z | T - LED white | G - Reflective, WT, 6:00 H - Transflective, WT, 6:00 I - Transmissive, WT, 6:00 J - Reflective, WT, 12:00 K - Transflective, WT, 12:00 L - Transmissive, WT, 12:00 | A - TFT LCD B - TFT+FR+Control Board C - TFT+FR+A/D Board D - TFT+FR+A/D Board+Control Board E - TFT+FR+Power Board F - TFT+Control Board G - TFT+FR H - TFT+D/V Board I - TFT+FR+D/V Board | A - 128 x 160 B - 320 x 234 C - 320 x 240 D - 480 x 234 E - 480 x 272 F - 640 x 480 G - 800 x 480 H - 1024 x 600 I - 320 x 480 J - 240 x 320 K - 800 x 600 L - 240 x 400 M - 1024 x 768 | D - Digital Type A - Analog Type L - LVDS Type | 0-Z | # Compliant |

OTHER OPTIONS AVAILABLE

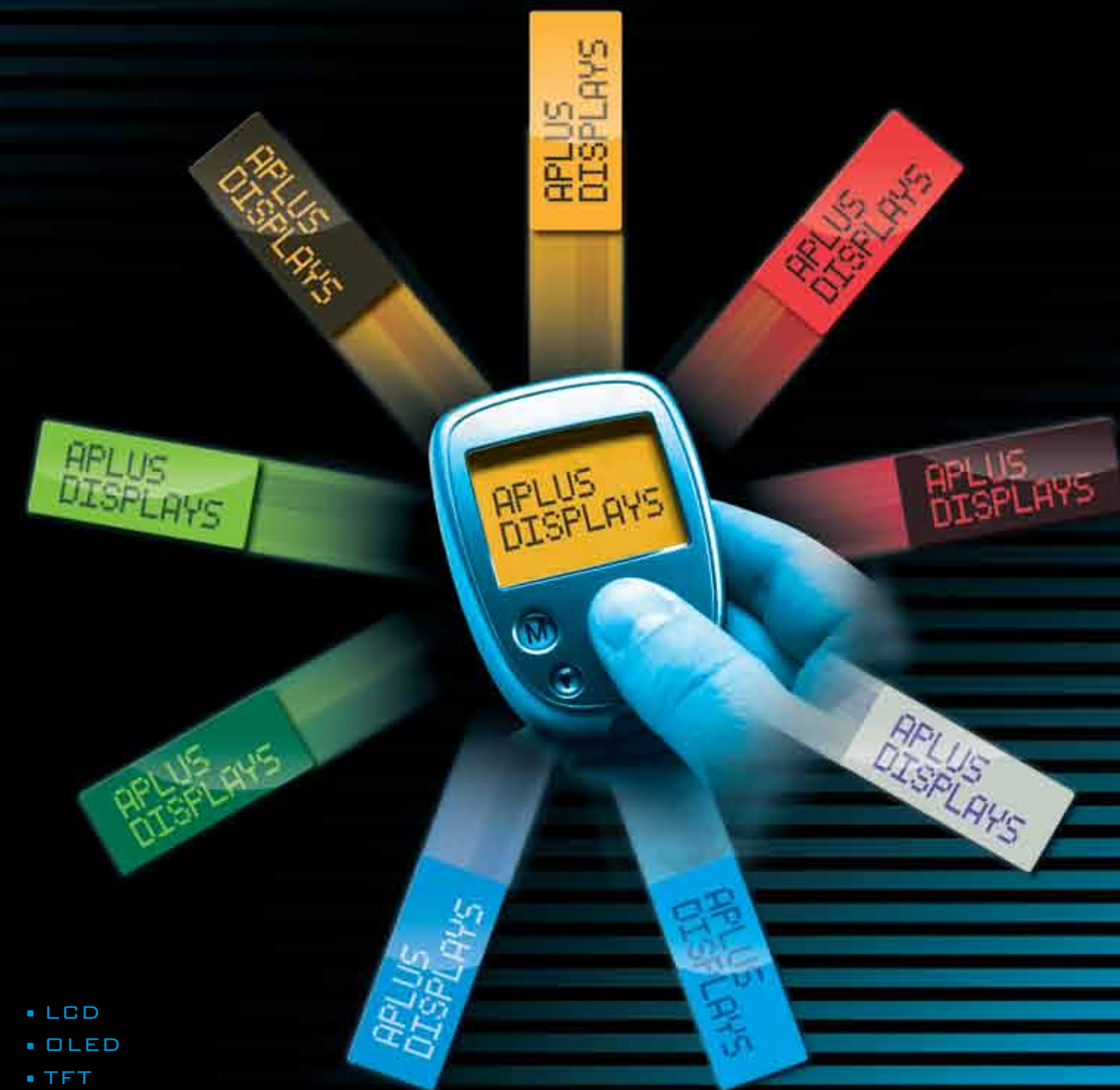


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DISPLAYS




- LCD
- OLED
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DIRECT DRIVE CUSTOM GLASS

- Custom Symbols and Characters
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- Low Tooling Costs
- Backlighting Available



CUSTOM LED DESIGN

- Multiple LEDs to a Single Custom Module
- Lower Material Costs
- Lower Assembly Placement Costs
- Bin Matched Reduces Floor Management

GRAPHIC LCDs

| Display Format | P/N | Outline Dimen. | Viewing Area | Dot Size | Dot Pitch | Controller | |
|----------------|-------------|--------------------|---------------|-------------|-------------|------------|--------|
| 122 x 32 | AG12232A/C | 84.0 x 44.0 | 60.0 x 18.0 | .40 x .45 | .44 x .49 | SBN1661G | |
| | AG12232B/G | 65.4 x 29.1 | 54.8 x 19.0 | .36 x .41 | .40 x .45 | SBN1661G | |
| | AG12232BP1 | 65.4 x 28.2 | 54.8 x 19.0 | .36 x .41 | .40 x .45 | SBN1661G | |
| | AG12232D/D1 | 59.0 x 29.3 | 52.0 x 15.0 | .345 x .345 | .375 x .375 | SBN1661G | |
| | AG12232E/J | 80.0 x 36.0 | 60.0 x 18.0 | .40 x .45 | .44 x .49 | SBN1661G | |
| | AG12232I | 50.0 x 29.3 | 52.0 x 15.0 | .345 x .345 | .375 x .375 | SBN1661G | |
| | AG12232K | 59.0 x 32.1 | 52.0 x 15.0 | .345 x .345 | .375 x .375 | SBN1661G | |
| | AG12232O | 77.8 x 27.2 | 60.0 x 18.0 | .40 x .45 | .44 x .49 | SBN1661G | |
| | AG12232L | 84.0 x 44.0 | 60.0 x 18.0 | .40 x .45 | .44 x .49 | SBN1661G | |
| | AG12232M | 50.0 x 29.3 | 52.0 x 19.4 | .345 x .345 | .375 x .375 | SBN1661G | |
| | AG12232N | 50.0 x 29.3 | 52.0 x 15.0 | .345 x .345 | .375 x .375 | SBN1661G | |
| | AG12232P | 80.0 x 36.5 | 64.0 x 17.9 | .40 x .45 | .44 x .49 | SBN1661G | |
| | 128 x 64 | AG12864A | 93.0 x 70.0 | 72.0 x 40.0 | .48 x .48 | .52 x .52 | KS0108 |
| | | AG12864B | 75.0 x 52.7 | 60.0 x 32.6 | .40 x .40 | .43 x .43 | KS0108 |
| AG12864C | | 78.0 x 70.0 | 62.0 x 44.0 | .42 x .58 | .44 x .60 | KS0108 | |
| AG12864D | | 78.0 x 70.0 | 62.0 x 44.0 | .42 x .58 | .44 x .60 | RA6963 | |
| AG12864E/EP1 | | 54.0 x 50.0 | 43.5 x 29.0 | .28 x .35 | .32 x .39 | KS0108 | |
| AG12864F | | 87.0 x 70.0 | 72.0 x 40.0 | .48 x .48 | .52 x .52 | RA6963 | |
| AG12864G | | 78.0 x 70.0 | 62.0 x 44.0 | .42 x .58 | .44 x .60 | RA6963 | |
| AG12864I | | 80.0 x 70.0 | 72.0 x 40.0 | .48 x .48 | .52 x .52 | KS0108 | |
| AG12864K | | 113.0 x 53.0 | 72.0 x 40.0 | .48 x .48 | .52 x .52 | KS0108 | |
| AG12864M | | 95.5 x 50.2 | 72.0 x 40.0 | .48 x .48 | .52 x .52 | KS0108 | |
| AG12864P3/P5 | | 83.0 x 52.7 x 8.4 | 60.0 x 32.6 | .39 x .39 | .43 x .43 | ST7920 | |
| AG12864U3/U5 | | 93.0 x 70.0 | 72.0 x 40.0 | .48 x .48 | .52 x .52 | ST7921 | |
| AG12864V3/V5 | | 93.0 x 70.0 | 72.0 x 40.0 | .48 x .48 | .52 x .52 | ST7920 | |
| AO12864A1 | | 60.1 x 44.5 | 54.6 x 32.0 | .36 x .40 | .36 x .43 | ST7565P | |
| AO12864B1 | | 89.7 x 49.8 | 69.0 x 36.5 | .47 x .47 | .50 x .50 | ST7565P | |
| AO12864C2 | | 55.2 x 39.8 | 45.2 x 27.0 | .28 x .34 | .32 x .38 | ST7565P | |
| AO12864D2 | | 90.0 x 52.8 | 70.7 x 38.8 | .48 x .48 | .52 x .52 | ST7565P | |
| AO12864D3 | | 80.0 x 54.0 x 10.2 | 70.7 x 38.8 | .48 x .48 | .52 x .52 | ST7565P | |
| AX12864L | | 90.5 x 50.0 | 67.0 x 40.0 | .42 x .50 | .46 x .55 | SED1565 | |
| AX12864T | | 35.0 x 24.22 | 29.58 x 17.98 | .18 x .23 | .25 x .20 | NT7534 | |
| AX1286T1 | 35.0 x 65.6 | 29.58 x 17.98 | .18 x .23 | .20 x .25 | NT7534 | | |
| AX1286U | 56.0 x 42.5 | 52.0 x 36.0 | .35 x .40 | .37 x .42 | NT7534 | | |
| AX1286U1 | 56.0 x 42.5 | 52.0 x 36.0 | .35 x .40 | .37 x .42 | NT7534 | | |
| 128 x 128 | AG128128A | 85.0 x 100.0 | 62.0 x 62.0 | .40 x .40 | .43 x .43 | RA6963 | |
| | AG128128B | 72.5 x 69.9 | 50.0 x 49.0 | .32 x .32 | .35 x .35 | LC7981 | |
| | AG128128C | 65.5 x 70.0 | 50.0 x 49.0 | .32 x .32 | .35 x .35 | RA6963 | |
| | AG128128H | 106.0 x 92.0 | 73.0 x 73.0 | .50 x .50 | .55 x .55 | RA6963 | |
| 144 x 32 | AG14432A | 85.0 x 36.0 | 66.0 x 16.0 | .38 x .38 | .42 x .42 | ST7920 | |
| | AG14432B | 80.0 x 36.0 | 66.0 x 16.0 | .38 x .38 | .42 x .42 | ST7920 | |
| | AG14432C | 84.0 x 44.0 | 66.0 x 16.0 | .38 x .38 | .42 x .42 | ST7920 | |
| | AG14432D | 85.5 x 30.0 | 66.0 x 16.0 | .38 x .38 | .42 x .42 | ST7920 | |
| 160 x 32 | AG14432E | 80.0 x 36.0 | 66.0 x 16.0 | .38 x .38 | .42 x .42 | ST7920 | |
| | AG16032A | 85.2 x 55.0 | 72.0 x 22.0 | .40 x .56 | .44 x .61 | SED1520 | |
| | AG16032C | 85.2 x 55.0 | 74.0 x 22.0 | .40 x .56 | .44 x .61 | ST7920 | |
| | AG16032D | 122.0 x 44.0 | 99.0 x 24.0 | .55 x .55 | .60 x .60 | ST7920 | |
| 160 x 80 | AG16032E | 85.2 x 55.0 | 72.0 x 22.0 | .40 x .56 | .44 x .61 | SBN1661G | |
| | AG16080B | 93.0 x 70.0 | 72.0 x 40.0 | .39 x .39 | .42 x .42 | LC7981 | |
| 160 x 80C | AG16080C | 100.0 x 55.0 | 72.0 x 40.0 | .48 x .48 | .52 x .52 | LC7981 | |
| | AG160128B | 129.0 x 102.0 | 101.0 x 82.0 | .56 x .56 | .60 x .60 | RA6963 | |
| 160 x 128 | AG160128C | 150.0 x 112.0 | 101.0 x 82.0 | .56 x .56 | .60 x .60 | RA6963 | |
| | AG160128E | 129.0 x 102.0 | 101.0 x 82.0 | .56 x .56 | .60 x .60 | RA6963 | |
| 160 x 160 | AG160160A | 89.2 x 85.0 | 62.0 x 62.0 | .34 x .34 | .38 x .38 | N/A | |
| | AG160160B | 85.0 x 100.0 | 62.0 x 62.0 | .34 x .34 | .38 x .38 | LC7981 | |
| | AO160160A | 83.8 x 76.5 | 60.0 x 60.0 | .32 x .32 | .34 x .34 | UC1698U | |
| | AO160160B | 82.2 x 77.5 | 60.0 x 60.0 | .32 x .32 | .34 x .34 | UC1698U | |
| 192 x 32 | AG19232B | 116.0 x 37.0 | 84.0 x 18.6 | .38 x .46 | .42 x .50 | ST7920 | |
| | AG19232C | 116.0 x 37.0 | 84.0 x 18.6 | .38 x .46 | .42 x .50 | ST7920 | |

LCD MODULE CODING SYSTEM



| 1 BRAND | 2 LCM TYPE | 3 ROW SIZE | 4 COLUMN SIZE | 5 SERIAL NO. | 6 BACKLIGHT TYPE | 7 LCD TYPE | 8 POLARIZE TYPE | 9 LANGUAGE | 10 Special Code | |
|--------------------|---|--|--|--------------|--|--|---|----------------------|---|-------------------------------|
| A - Aplus Products | H - Character G - Graphic X - TAB | 08 - Character 12 - Character 16 - Character 20 - Character 24 - Character 40 - Character | 01 - Lines 02 - Lines 04 - Lines | A-Z | N - Without backlight Y - LED, Yellow-Green backlight A - LED, Amber backlight R - LED, Red backlight G - LED, Green backlight T - LED, White backlight P - LED, Blue backlight F - CCFL, White backlight | B - TN positive, Gray N - TN negative, Black H - HTN positive, Gray I - HTN negative, Black G - STN positive, Gray Y - STN positive, Yellow-Green M - STN negative, Blue F - FSTN positive, White T - FSTN negative, Black | G - Reflective, WT, 6:00 H - Transflective, WT, 6:00 I - Transmissive, WT, 6:00 J - Reflective, WT, 12:00 K - Transflective, WT, 12:00 L - Transmissive, WT, 12:00 | Character Graphic | V - Neg. Volt N - w/o Neg. Volt T - Temp Comp | ** Other Options Available |

OTHER OPTIONS AVAILABLE

CHARACTER LCDs

| Display Format | P/N | Outline Dimen. | Viewing Area | Character Size |
|----------------|-----------|--------------------|--------------|----------------|
| 8 x 2 | AH0802A1 | 58.0 x 32.0 | 38.0 x 16.0 | 2.96 x 5.56 |
| 12 x 2 | AH1202A | 55.7 x 32.0 | 46.0 x 14.5 | 2.65 x 5.50 |
| | AH1601A | 80.0 x 36.0 | 66.0 x 16.0 | 3.07 x 6.56 |
| 16 x 1 | AH1601B | 85.0 x 28.0 | 66.0 x 16.0 | 3.07 x 6.56 |
| | AH1601L | 122.0 x 33.0 | 99.0 x 13.0 | 4.84 x 8.06 |
| | AH1602A | 84.0 x 44.0 | 66.0 x 16.0 | 2.95 x 5.55 |
| | AH1602B | 80.0 x 36.0 | 66.0 x 16.0 | 2.96 x 5.56 |
| 16 x 2 | AH1602C | 85.0 x 36.0 | 66.0 x 16.0 | 2.96 x 5.56 |
| | AH1602D | 85.0 x 30.0 | 66.0 x 16.0 | 2.96 x 5.56 |
| | AH1602J | 80.0 x 36.0 | 66.0 x 16.0 | 2.96 x 5.56 |
| | AH16021L1 | 122.0 x 44.0 | 99.0 x 24.0 | 4.84 x 9.66 |
| | AH1602M | 85.0 x 32.6 | 66.0 x 16.0 | 2.95 x 5.56 |
| | AH1602O | 85.0 x 25.2 | 66.0 x 16.0 | 2.96 x 5.95 |
| | AH1602P | 85.0 x 25.2 | 66.0 x 16.0 | 2.95 x 5.55 |
| | AH1602S | 59.0 x 29.3 | 52.0 x 15.3 | 2.45 x 4.67 |
| | AH1602T | 65.4 x 28.2 | 54.8 x 19.0 | 3.05 x 5.57 |
| | AH1602V2 | 69.0 x 29.2 | 61.0 x 15.9 | 2.95 x 5.55 |
| | AH1602W | 80.0 x 36.0 x 13.2 | 66.0 x 16.0 | 2.95 x 5.55 |
| | AO1602F | 72.1 x 29.6 | 61.0 x 15.1 | 2.95 x 5.55 |
| | AO1602G | 74.2 x 25.2 | 61.0 x 15.1 | 2.95 x 5.55 |
| | AO1602H | 62.8 x 23.0 | 51.5 x 12.2 | 2.60 x 4.67 |
| | AO1602I | 51.2 x 20.7 | 40.0 x 10.1 | 2.00 x 3.79 |
| | 16 x 4 | AH1604A | 87.0 x 60.0 | 62.0 x 26.0 |
| AH1604B | | 70.6 x 60.0 | 60.0 x 32.6 | 2.95 x 4.75 |
| 20 x 1 | AH1604E | 87.0 x 60.0 | 62.0 x 26.0 | 2.95 x 4.75 |
| | AH2001B | 180.0 x 40.2 | 149.0 x 23.0 | 6.00 x 12.715 |
| 20 x 2 | AH2002A | 116.0 x 37.0 | 85.0 x 18.6 | 3.20 x 5.55 |
| | AH2002D | 89.0 x 21.5 | 75.0 x 15.0 | 2.95 x 5.15 |
| | AH2002L | 180.0 x 40.0 | 149.0 x 23.0 | 6.00 x 9.66 |
| | AH2002M | 146.0 x 43.0 | 123.0 x 23.0 | 4.84 x 9.22 |
| 20 x 4 | A02002A | 74.2 x 25.2 | 61.0 x 15.1 | 146.0 x 43.0 |
| | AH2004A/B | 98.0 x 60.6 | 77.0 x 25.2 | 2.95 x 4.75 |
| 24 x 2 | AH2004D | 77.0 x 47.0 | 60.0 x 22.0 | 2.30 x 4.03 |
| | AH2004L | 146.0 x 62.5 | 123.5 x 43.0 | 4.84 x 9.22 |
| 40 x 2 | AH2402A | 118.0 x 36.0 | 94.5 x 16.0 | 3.20 x 5.55 |
| | A02402A | 86.2 x 24.7 | 72.3 x 11.84 | 2.45 x 4.67 |
| 40 x 4 | AH4002A | 182.0 x 33.5 | 154.4 x 16.5 | 3.20 x 5.55 |
| | AH4004A | 190.0 x 54.0 | 147.0 x 29.5 | 2.78 x 4.89 |

AVAILABLE COLORS



GRAPHIC OLEDs

| Display Format | P/N | SIZE | Outline Dimen. | Viewing Area | Module | Dot Pitch | Color |
|----------------|-------------|-------|----------------|-----------------|--------|---------------|-----------|
| 50 x 16 | AEG005016AL | 1.26" | 58.0 x 32.0 | 38.0 x 16.0 | COB | 0.60 x 0.70 | R/G/B/Y |
| 76 x 16 | AEG007616AL | 1.70" | 55.7 x 32.0 | 46.0 x 14.5 | COB | 0.55 x 0.70 | Y |
| 100 x 8 | AEG10008AL | 2.37" | 80.0 x 36.0 | 66.0 x 16.0 | COB | 0.60 x 0.80 | W/R/G/B/Y |
| 100 x 16 | AEG10016AL | 2.40" | 80.0 x 36.0 | 66.0 x 16.0 | COB | 0.60 x 0.70 | W/R/G/B/Y |
| | AEG10016BL | 3.84" | 122.0 x 44.0 | 99.0 x 24.0 | COB | 0.96 x 1.12 | R/G/B/Y |
| | AEG10016CL | 2.40" | 85.0 x 36.0 | 66.0 x 16.0 | COB | 0.60 x 0.70 | W/R/G/B/Y |
| | AEG10016DL | 2.40" | 85.0 x 30.5 | 66.0 x 16.0 | COB | 0.60 x 0.70 | W/R/G/B/Y |
| | AEG10016EL | 2.40" | 84.0 x 44.0 | 66.0 x 16.0 | COB | 0.60 x 0.70 | W/R/G/B/Y |
| 200 x 16 | AEG20016AL | 5.14" | 182.00 x 33.50 | 154.40 x 16.50 | COB | 0.65 x 0.70 | W/R/G/B/Y |
| 100 x 32 | AEG010032AL | 2.44" | 98.0 x 60.0 | 77.0 x 25.2 | COB | 0.59 x 0.60 | W/R/G/B/Y |
| | AEG010032BL | 2.44" | 98.0 x 60.0 | 77.0 x 25.2 | TAB | 0.59 x 0.60 | R/G/B/Y |
| 132 x 32 | AEX12232AL | 2.26" | 84.0 x 44.0 | 60.00 x 18.00 | TAB | 0.42 x 0.48 | Y |
| | AEX009664AL | 1.10" | 33.59 x 23.62 | 25.49 x 17.65 | TAB | 0.245 x 0.245 | Y |
| 96 x 64 | AEO009664AL | 0.95" | 24.9 x 22.95 | 21.953 x 15.424 | COG | 0.208 x 0.21 | Y |
| | AEX012864CL | 2.70" | 82.7 x 40.2 | 63.41 x 32.69 | TAB | 0.48 x 0.48 | G/Y |
| 128 x 64 | AEX012864DL | 2.70" | 73.00 x 41.86 | 63.41 x 32.69 | TAB | 0.48 x 0.48 | R/G/B/Y |
| | AEX012864GL | 2.40" | 75.52 x 52.70 | 57.01 x 29.49 | TAB | 0.43 x 0.43 | W/Y |
| | AEX012864ML | 2.40" | 60.50 x 37.00 | 57.01 x 29.49 | TAB | 0.43 x 0.43 | Y |
| | AEX012864LL | 2.70" | 89.70 x 47.20 | 63.41 x 32.69 | TAB | 0.48 x 0.48 | Yellow |
| | AEX012864QL | 2.70" | 73.00 x 47.20 | 63.41 x 32.69 | TAB | 0.48 x 0.48 | G/Y |
| | AEO012864DL | 2.70" | 26.70 x 19.26 | 21.738 x 10.858 | COG | 0.17 x 0.17 | W/Y |
| | AEX025664AL | 2.80" | 84.00 x 25.80 | 71.104 x 19.264 | TAB | 0.27 x 0.27 | W/Y/B |
| | AEX025664BL | 3.12" | 88.00 x 27.80 | 78.78 x 21.18 | TAB | 0.30 x 0.30 | W/Y |

CONTACT APLUS FOR COMPLETE PART NUMBER AND AVAILABILITY

CHARACTER OLEDs

| Display Format | P/N | SIZE | Outline Dimen. | Viewing Area | Color |
|----------------|-------------|-------|----------------|--------------|---------|
| 8 x 2 | AEH000802AL | 1.20" | 58.0 x 32.0 | 38.0 x 16.0 | R/G/B/Y |
| 12 x 2 | AEH001202AL | 1.60" | 55.7 x 32.0 | 46.0 x 14.5 | Y |
| 16 x 1 | AEH001601AL | 2.26" | 80.0 x 36.0 | 66.0 x | |