

# VFD POS / Retail Applications

# POS Cash Register



## POS Retail Scale



## Advantages of VF-Displays

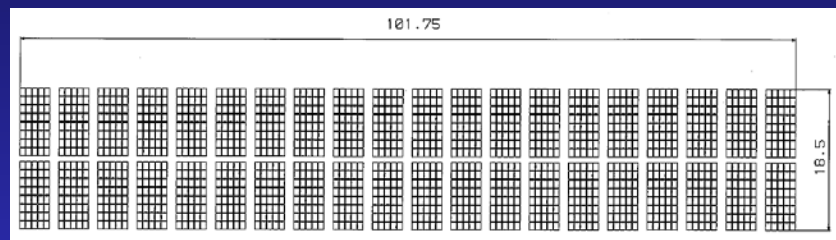
- wide distance recognition / viewing angle
- multicolor capability by filter & phosphor
- wide operating temperature
- grey scale / digital dimming



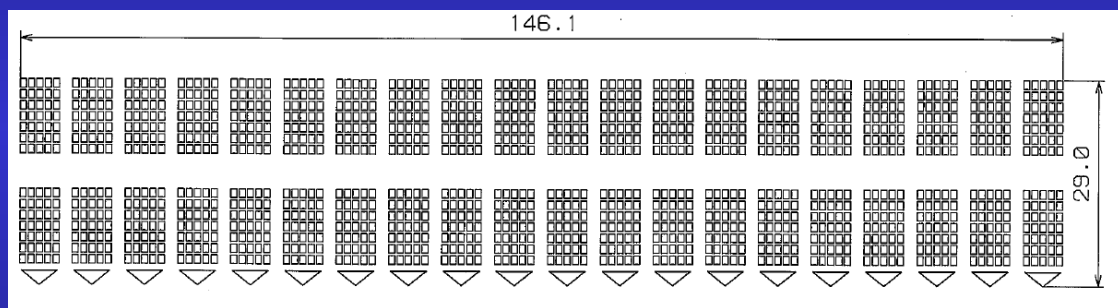
## 20x2 Dot Matrix for Cash Register & Scale



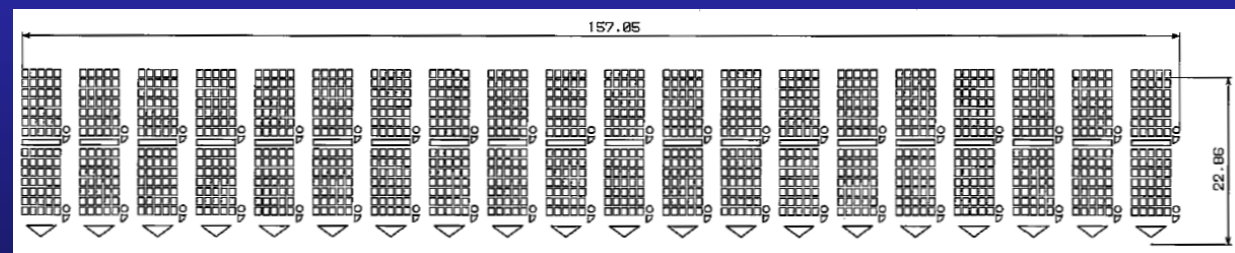
202MD15 char. size 3.9 x 7.7 mm



202MD12 char. size 5.5 x 10.5 mm



202MD20 char. size 5.3 x 9.0 mm



## New Graphic Modules for POS

- **GP1184A01** 140 x 16 pixel

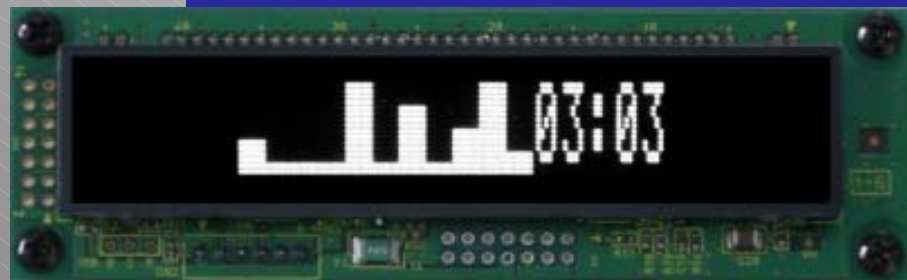


- pixel pitch **0.50 x 0.73** mm
- display area **70 x 12** mm (typ. DM 25x2 line)
- multisize **character generator ROM** (5x7 to 8x16)
- user definable **graphic & character area**
- **dimming** (8 level)
- sync, async, RS-232 **serial** & 8bit **parallel** control



## New Graphic Modules

- GP1184A01 Display Examples



## New Graphic Modules for POS

- GP9002A01 128 x 64 pixel



- display area 57 x 29 mm
- pixel pitch 0.45 mm
- optional character generator ROM
- selectable grey scale mode (4 level)
- dimming (72 level)
- sync. & async. serial + 8 bit bus parallel control
- 5 Vdc power supply



# Graphic Font Display

ABCDEFGHIJKLMN  
OPQRSTUVWXYZ012345  
abcdefghijklmnop  
qrstuvwxyz6789Ää

ABCDEFGHIJKLMN  
OPQRSTUVWXYZ 0123456789:; <=>  
abcdefghijklmnopqrstu  
vwxyz6789ÄäöøÙÙ€

垂娃阿哀愛挨始逢  
鯨梓压幹扱宛姐虻  
庵按暗案伊鞍杏闇

1234567890123456789012  
Agency FB 13 CH 6,3 mm  
up to 24x4 lines  
abcdefghijklmnopqrstu  
vwxyz

Antenne Bayern  
Nachrichten / Wetter

WDR 2  
Daheim und Unterwegs

## New Graphic Modules for POS

- GP1157A01 / GP1205A01A 256 x 64 pixel



- pixel pitch 0,45 mm
- display area 115 x 29 mm
- animation effects: curtain & random fade, scroll & blinking
- multisize character generator ROM (5x7 & 8x16)
- dimming (5 level)
- RS-232 serial & 8 bit bus parallel control
- GP1205A01A low cost version (only parallel control)

## New Graphic Modules for POS

- **GP1160A01** 256 x 64 pixel (large pixel size)



- pixel pitch 0,64 x 0,62 mm
- display area 164 x 38 mm
- multisize character generator ROM (5x7 & 8x16)
- dimming (5 level)
- RS-232 serial control

## Colour Variation by Filter

Futaba M1625D12A  
16x2 Dot Matrix

Futaba M1625D12A  
16x2 Dot Matrix

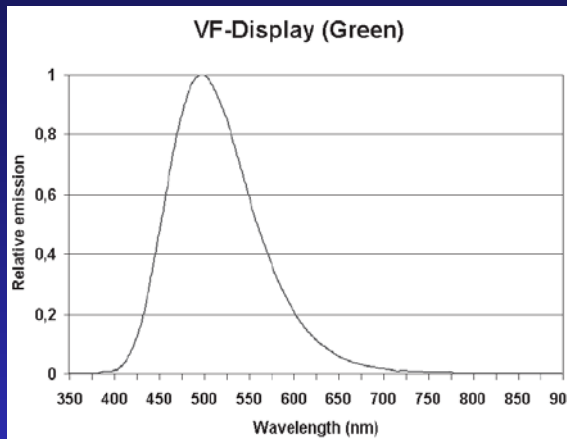
Futaba M1625D12A  
16x2 Dot Matrix

Futaba M1625D12A  
16x2 Dot Matrix

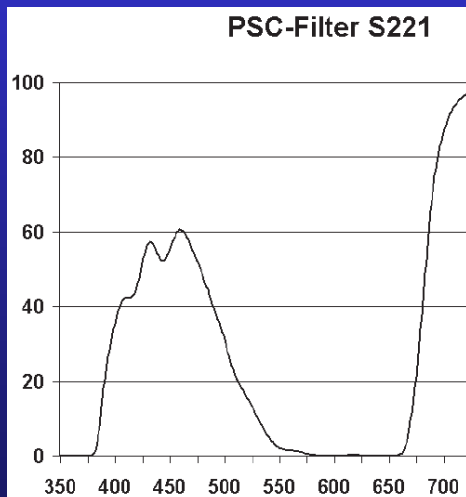
| PSC-filter<br>(number) | Description<br>(name)                | Chromatic values<br>acc. to CIE 1931 |      | Relative light intensity<br>(%) |       |
|------------------------|--------------------------------------|--------------------------------------|------|---------------------------------|-------|
|                        |                                      | x                                    | y    |                                 |       |
| S106                   | Amber                                | 0.48                                 | 0.46 |                                 | 6.3   |
| S107                   | Warm Green                           | 0.37                                 | 0.62 |                                 | 10.5  |
| S110                   | Red                                  | 0.70                                 | 0.30 |                                 | 4.2   |
| S140                   | Green                                | 0.15                                 | 0.62 |                                 | 18.5  |
| S142                   | Green                                | 0.11                                 | 0.68 |                                 | 16.3  |
| S202                   | Cool Blue / Ice Blue /<br>Blue Green | 0.19                                 | 0.31 |                                 | 27.9  |
| S221                   | Blue                                 | 0.12                                 | 0.18 |                                 | 25.4  |
| S243                   | Cool Green                           | 0.10                                 | 0.47 |                                 | 22.8  |
| S721                   | Yellowish White                      | 0.42                                 | 0.44 |                                 | 24.7  |
| S722                   | LED Yellow                           | 0.54                                 | 0.43 |                                 | 14.4  |
| S727                   | Cold White                           | 0.31                                 | 0.35 |                                 | 36.2  |
| S728                   | Cold White + N.D.                    | 0.30                                 | 0.34 |                                 | 16.1  |
| S735                   | Bluish Green                         | 0.19                                 | 0.37 |                                 | 13.7  |
| S737                   | Green + N.D.                         | 0.27                                 | 0.59 |                                 | 14.3  |
| S738                   | Green                                | 0.26                                 | 0.59 |                                 | 35.2  |
| S742                   | Cool White                           | 0.32                                 | 0.35 |                                 | 36.3  |
| S743                   | Greenish White                       | 0.25                                 | 0.35 |                                 | 51.6  |
| S745                   | White, neutral cool                  | 0.32                                 | 0.32 |                                 | 30.4  |
| S746                   | White, neutral<br>definition         | 0.33                                 | 0.33 |                                 | 30.3  |
| S751                   | Orange - N.D.                        | 0.48                                 | 0.52 |                                 | 10.1  |
| S752                   | Yellow + N.D. (Neon<br>Green)        | 0.32                                 | 0.59 |                                 | 24.8  |
| VFD                    | Display W.O. Filter<br>(EUTABA) *    | 0.23                                 | 0.41 |                                 | 100.0 |

Typical  
Filter colours

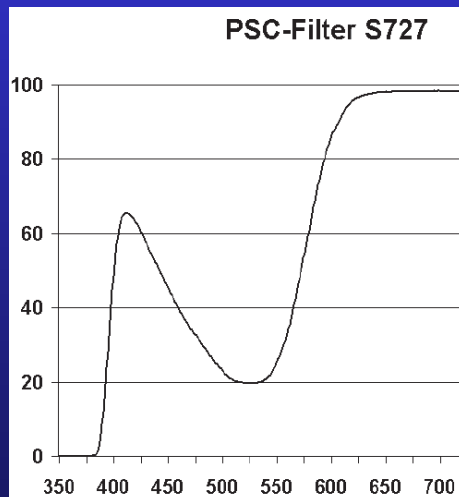
## Colour by Filter



Blue



White



Red

