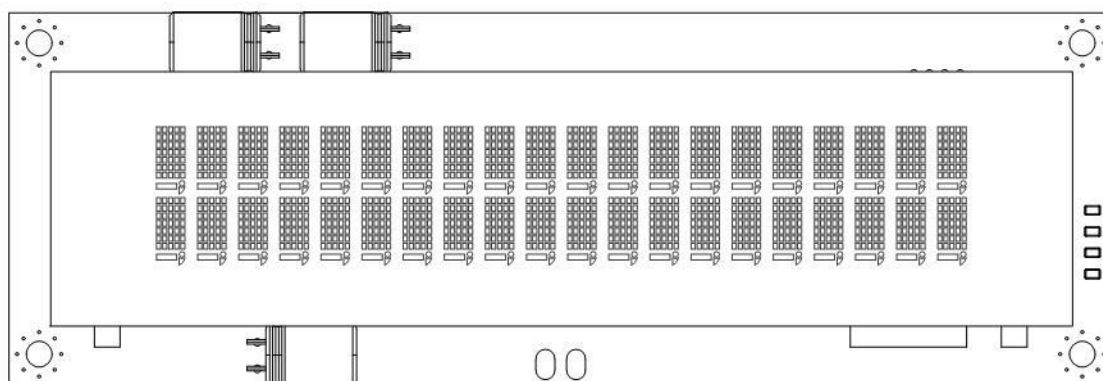




USER MANUAL

Vacuum Fluorescent Customer Display

Model: **WDM-M2027**



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1. Features

1. Data can be displayed on 20 columns x 2 lines.
2. Blue-green color and large character are easy to eye.
3. The commands modes, fonts, baud rate and other parameters are selected by software.
4. DSP800, EPSON ESC/POS, POS7300, ADM788, AEDEX, UTC/P, UTC/S, CD5220 emulation command sets.
5. User-defined characters can be downloaded (for DSP800, EPSON ESC/POS, CD5220 command).
6. Support OPOS version 1.13.
7. Provides an interface based on RS-232C or USB (baud rate: 4800, 9600, 19200, 38400, 115200 bps).
8. Powered by 5V.

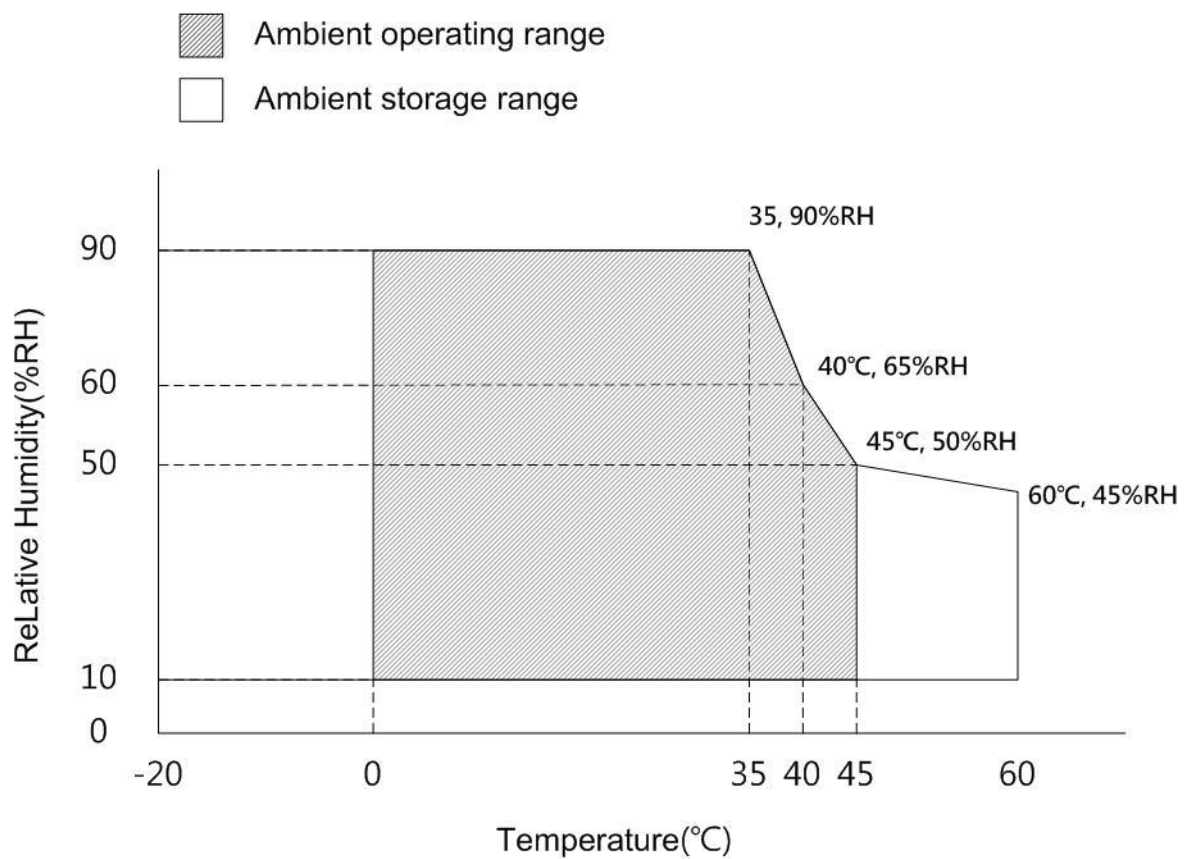
2. General Specifications

2.1 Main Specifications

	Item	Description	
1	Display method	Vacuum fluorescent display	
2	Number of character	40 characters (20 columns x 2 lines)	
3	Character font	5 x 7 dot matrix	
4	Display color	Blue green	
5	Brightness	700 cd/m ²	
6	Character type	96 alphanumeric 11 kinds of international character set 1 kind of user define character	
7	Character size	6.75 mm x 3.75 mm	
8	Power supply	5.0 VDC	
9	Power consumption	2.3 W (Max.)	
10	MTBF	25,000 hours	
11	Module dimensions	146.0 (W) x 49.0 (H) x 14.9 (D) mm	
13	Weight	85g	
12	Interface	USB and RS-232C are optional	
13	Temperature	Operating: 0 ~ 45°C	Storage: -20 ~ 60°C
14	Humidity	Operating: 10 ~ 90 %RH	Storage: 10 ~ 90 %RH

2.2 Operating Specifications

	Item	Description
Temperature/ Humidity	Operating	0 to 45°C (32 to 113°F), 10 to 90% RH no condensation allowed. (Refer to ambient operating ranges in the figure below.)
	Storage (shipped packed state)	-20 to +60°C (-4 to 140°F), 10 to 90% RH (excluding paper)



3. Interface Specifications

3.1 RS-232C Specifications

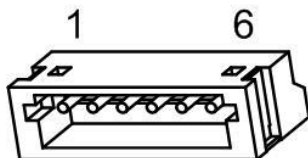
Data transmission:	Serial
Synchronizing:	Asynchronous
Handshaking:	DTR / DSR
Baud rate:	4800,9600,19200,38400 or 115200 bps
Parity and bit length:	None parity, 8 data bits or Even parity, 7 data bits
Stop bits:	1 or more

3.2 RS-232C connecter

Pin assignment

No.	Signal Name	I/O	Function description
1	TXD	Output	Transmit data
2	RXD	Input	Receive data
3	RTS	Output	Request to Send
4	CTS	Input	Clear to Send
5	GND	-	Signal ground
6	VIN	-	Power 5 VDC

Type: JST/ZH/1.5mm/6P(CN6)

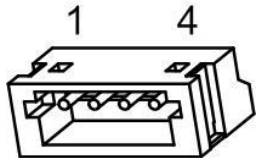


3.3 USB connecter

Pin assignment

No.	Signal Name	Function description
1	GND	Signal ground
2	USBD+	USB data signal +
3	USBD-	USB data signal -
4	5VDC	Power input from PC/Host

Type: JST/ZH/1.5mm/4P (CN2)



4. Default Setting Commands

4.1 Select Command Set

Code (Hex)	Function descriptions
[02h] [05h] [43h] n [03h]	Change command type
n (hex)	Command
30h	DSP800
31h	ESC/POS
32h	POS7300
33h	ADM788
34h	AEDEX
35h	UTC/P
36h	UTC/S
37h	CD5220

4.2 Select Baud Rate, Parity

1. Select Baud Rate

Code (Hex)	Function descriptions
[02h] [05h] [42h] n [03h]	Change the baud rate setting
n (hex)	Baud rate
30h	4800
31h	9600
32h	19200
33h	38400
39h	115200

2. Select Parity Check

Code (Hex)	Function descriptions
[02h] [05h] [50h] n [03h]	Change the format setting
n (hex)	Format
30h	None-Parity
31h	Even-Parity
32h	Odd-Parity

3. Select Data Length

Code (Hex)	Function descriptions
[02h] [05h] [4Ch] n [03h]	Change the data length setting
n (hex)	Format
37h	7 bit
38h	8 bit

4.3 Select International Character

Code (Hex)	Function descriptions
[02h] [05h] [54h] n [03h]	Change international character set
n (hex)	International character set
00h	U.S.A.
01h	France
02h	Germany
03h	U.K.
04h	Denmark I
05h	Sweden
06h	Italy
07h	Spain
08h	Japan
09h	Norway
0Ah	Denmark II

4.4 Select Code Page

Code (Hex)	Function descriptions
[02h] [05h] [55h] n [03h]	Change code page table
n (hex)	Character code table
00h	CP-437 (USA, Standard Europe)
01h	Katakana (for Japan)
02h	CP-850 (Multilingual)
03h	CP-860 (Portuguese)
04h	CP-863 (Canadian-French)
05h	CP-865 (Nordic)
06h	Slawie
07h	Russian
08h	CP-737 (Greek)
09h	CP-852 (Hungary)
0Ah	CP-862 (Hebrew)
0Bh	CP-866 (Cyrillic)
0Ch	WCP-1251 (Cyrillic)
0Eh	WCP-1255 (Hebrew)
0Fh	WCP-1257 (Baltic)
10h	WCP-1252 (West European Latin)
11h	WCP-1253 (Greek)
12h	WCP-1250 (East European Latin)
13h	CP-858 (Multilingual + Euro Symbol)
14h	ISO8859-7 (Greek)
15h	CP-857 (Turkish)
17h	WPC-1254 (Turkish)
E0h	CP-775 (Baltic)
E2h	CP-864 (Arabic)

4.5 Select International Character and Code Page

Code (Hex)		Function descriptions
[02h] [05h] [53h] n [03h]		Change international char and code page
n (hex)	Character set (20h-7Fh)	Code table (80h-FFh)
30h	U.S.A.	CP-437
31h	France	CP-858
32h	Germany	CP-858
33h	U.K.	CP-858
34h	Denmark I	CP-858
35h	Sweden	CP-858
36h	Italy	CP-858
37h	Spain	CP-858
38h	Japan	Katakana
39h	Norway	CP-858
3Ah	Denmark II	CP-858
3Bh	U.S.A.	Slawie
3Ch	U.S.A.	Russian
3Dh	U.S.A.	CP-860
3Eh	U.K.	CP-737 (Greek)
3Fh	U.S.A.	CP-852
40h	U.S.A.	CP-862
41h	U.S.A.	CP-863
42h	U.S.A.	CP-865
43h	U.S.A.	CP-866
44h	U.S.A.	WCP-1251
45h	U.S.A.	WCP-1252
46h	U.S.A.	WCP-1255
47h	U.S.A.	WCP-1257
48h	U.S.A.	WCP-1253
49h	U.S.A.	WCP-1250

4.6 Show Firmware Version

Code (Hex)	Function descriptions
[02h] [05h] [56h] [01h] [03h]	Show firmware version

4.7 Save Screen Data as Title Data

Code (Hex)	Function descriptions
[02h] [05h] [08h] [31h] [03h]	Save current screen data as title data

4.8 Clear Flash Setup Data

Code (Hex)	Function descriptions
[02h] [05h] [07h] n [03h]	Clear setup data in flash memory
n (hex)	Command
31h	Set Default Value
32h	Clear flash title data

4.9 Display Restart

Code (Hex)	Function descriptions
[02h] [05h] [40h] [30h] [03h]	Display restart

4.10 Read Customer Display Information

Code (Hex)	Function descriptions
[02h] [05h] [49h] n [03h]	Read customer display information
n (hex)	Command
42h	Return baud rate
43h	Return default command set
54h	Return international character set
55h	Return code page
56h	Return firmware version

5. Commands

5.1 DSP800 mode command list

Command	Code (Hex)	Function descriptions
EOT SOH I n ETB	04 01 49 n 17	Select international character set. n = 00 ~ 0Ah or 30 ~ 3Ah (Refer*1)
EOT SOH P n ETB	04 01 50 n 17	Move cursor to specified position. $31h \leq n \leq 58h$
EOT SOH C n m ETB	04 01 43 n m 17	Clear display range from n position to m position and move cursor to n position. $31h \leq n \leq m \leq 58h$
EOT SOH S n ETB	04 01 53 n 17	Save the current displaying data to n layer for demo display. $31h \leq n \leq 33h$ (Refer*2)
EOT SOH D n m ETB	04 01 44 n m 17	Display the saved data. $31h \leq n \leq 37h, 31h \leq m \leq 37h$ (Refer*3)
EOT SOH A n ETB	04 01 41 n 17	Brightness adjustment. $31h \leq n \leq 34h$
EOT SOH F n ETB	04 01 46 n 17	Blink display screen. $00h \leq n \leq FFh$
EOT SOH & n [px5] ETB	04 01 26 n p1... p5 17	Define download characters. $20h \leq n \leq FFh$ displayable character code [p1~p5] Byte1~Byte5 define Character
EOT SOH ? n ETB	04 01 3F n 17	Delete download characters. $20h \leq n \leq FFh$
EOT SOH % ETB	04 01 25 17	Initialize display
EOT SOH @ ETB	04 01 40 17	Execute self-test

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Refer*1. Select international character set (23h~7Eh) for command " EOT SOH I n ETB "

n	International font
00h, 30h	U.S.A.
01h, 31h	France
02h, 32h	Germany
03h, 33h	U.K.
04h, 34h	Denmark I
05h, 35h	Sweden
06h, 36h	Italy
07h, 37h	Spain
08h, 38h	Japan
09h, 39h	Norway
0Ah, 3Ah	Denmark II

Refer*2. Using commands "EOT SOH S n ETB", the value (Hex) of parameter

n	Layer
31h	Save data in layer 1
32h	Save data in layer 2
33h	Save data in layer 3

Refer*3. Using commands "EOT SOH D n m ETB", the value (Hex) of parameter.
WinPOS extended "select mode" from 33h to 37h

n	Select layer	m	Select mode
31h	Demo layer 1	31h	Demo mode 1
32h	Demo layer 2	32h	Demo mode 2
33h	Demo layer 3	33h	Demo mode 3
34h	Demo layer 1 + 2	34h	Demo mode 1 + 2
35h	Demo layer 1 + 3	35h	Demo mode 1 + 3
36h	Demo layer 2 + 3	36h	Demo mode 2 + 3
37h	Demo layer 1 + 2 + 3	37h	Demo mode 1 + 2 + 3

5.2 EPSON ESC/POS command list

Command	Code (Hex)	Function descriptions
HT	09	Move cursor right.
BS	08	Move cursor left.
US LF	1F 0A	Move cursor up.
LF	0A	Move cursor down.
US CR	1F 0D	Move cursor to right-most position.
CR	0D	Move cursor to left-most position.
HOM	0B	Move cursor to home position.
US B	1F 42	Move cursor to bottom position.
US \$ x y	1F 24 x y	Move cursor to specified position. $1 \leq x \leq 20$, for columns location. $1 \leq y \leq 2$, for lines location.
CLR	0C	Clear display screen.
CAN	18	Clear cursor line
US X n	1F 58 n	Brightness adjustment. $1 \leq n \leq 4$
US E n	1F 45 n	Blink display screen. $0 \leq n \leq 255$
ESC @	1B 40	Initialize display.
ESC R n	1B 52 n	Select international character set. (Refer*1)
ESC t n	1B 74 n	Select character code table. (Refer*2)
US r n	1F 72 n	Select/cancel reverse character. $0 \leq n \leq 1$
US MD1	1F 01	Specify overwrite mode.
US MD2	1F 02	Specify vertical scroll mode.
US MD3	1F 03	Specify horizontal scroll mode.
ESC & SOH n m [a (p1... pa)] x (m-n+1)	1B 26 01 n m [a(p1... pa)] x (m-n+1)	Define download characters. $32 \leq n \leq m \leq 255$ $1 \leq a \leq 5$ p1... p5 = row1... row5
ESC ? n	1B 3F n	Delete downloads characters. $32 \leq n \leq 255$

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ESC % n	1B 25 n	Select / cancel download character set. n = 0 , Cancel n = 1 , Select
US :	1F 3A	Set starting / ending position of macro definition.
US ^ n m	1F 5E n m	Execute and quit macro. $0 \leq n \leq 255$, $0 \leq m \leq 255$
US @	1F 40	Execute self-test.
US T h m	1F 54 h m	Display time $0 \leq h \leq 23$, $0 \leq m \leq 59$
US U	1F 55	Display time continuously
US C n	1F 43 n	Select / cancel cursor display n = 1 , cursor on n = 0 , cursor off
US . n	1F 2E n	Display Period. $32 \leq n \leq 126$ and $128 \leq n \leq 255$
US , n	1F 2C n	Display Comma. $32 \leq n \leq 126$ and $128 \leq n \leq 255$
US ; n	1F 3B n	Display Semicolon. $32 \leq n \leq 126$ and $128 \leq n \leq 255$

Refer*1. Select international character set (23h~7Eh) for command " ESC R n "

Parameter "n"		International font
Dec	Hex	
0	00h	U.S.A.
1	01h	France
2	02h	Germany
3	03h	U.K.
4	04h	Denmark I
5	05h	Sweden
6	06h	Italy
7	07h	Spain
8	08h	Japan
9	09h	Norway
10	0Ah	Denmark II

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Refer*2. Select character code table (80h~FFh) for command " ESC t n "

Parameter "n"		Code table
Dec	Hex	
0	00h	CP-437 (USA, Standard Europe)
1	01h	Katakana (for Japan)
2	02h	CP-850 (Multilingual)
3	03h	CP-860 (Portuguese)
4	04h	CP-863 (Canadian-French)
5	05h	CP-865 (Nordic)
6	06h	Slawie
7	07h	Russian
12	0Ch	CP-737 (Greek)
13	0Dh	CP-775 (Baltic)
14	0Eh	CP-864 (Arabic)
15	0Fh	CP-857 (Turkish)
16	10h	WCP-1252 (West European Latin)
19	13h	CP-858 (Multilingual + Euro Symbol)
26	1Ah	WCP-1257 (Baltic)

5.3 POS7300 series command list

Command	Code (Hex)	Function description
ESC F A [DATA] CR	1B 46 41 [DATA] 0D	Write string to upper line Maximal [DATA] length is 20
ESC F B [DATA] CR	1B 46 42 [DATA] 0D	Write string to lower line Maximal [DATA] length is 20
ESC F D [DATA] CR	1B 46 44 [DATA] 0D	Upper line message scroll continuously Maximal [DATA] length is 40
ESC F O [DATA] CR	1B 46 4F [DATA] 0D	Bottom line message scroll continuously Maximal [DATA] length is 40
ESC P x y	1B 50 x y	Move cursor to specified position x = 1 ~ 20, for columns location. y = 1 ~ 2, for lines location.
ESC _ n	1B 5F n	Set cursor on/off n = 00h ~ 01h
ESC DC1	1B 11	Overwrite mode
ESC DC2	1B 12	Vertical scroll mode
ESC DC3	1B 13	Horizontal scroll mode
ESC @	1B 40	Initialize display
US DC1 n	1F 11 n	Set line blinking n = '1' ~ '2' n = '1' up line n = '2' low line
US DC2 n	1F 12 n	Clear line blinking n = '1' ~ '2' n = '1' up line n = '2' low line
US , n	1F 2C n	Specify comma n = a displayable character code
US . n	1F 2E n	Specify period n = a displayable character code
US ; n	1F 3B n	Specify semicolon (period + comma) n = a displayable character code
US @	1F 40	Execute self - test

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US E n	1F 45 n	Blink display screen n = 00h ~ FFh n = 0 for no blink
US T h m	1F 54 h m	Display time $0 \leq h \leq 17h$, for hours setting $0 \leq m \leq 3Bh$, for minutes setting
US U	1F 55	Display time continuously
US X n	1F 58 n	Brightness adjustment n = 1 ~ 4
US r n	1F 72 n	Select / cancel reverse character. n = 00, 01
NULL H	0 48	Move cursor up
NULL K	0 4B	Move cursor left
NULL M	0 4D	Move cursor right
NULL P	0 50	Move cursor down
NULL G	0 47	Move cursor to left-most position
NULL O	0 4F	Move cursor to right-most position
BS	08	Back Space
HT	09	Horizontal tab
LF	0A	Line feed
HOM	0B	Move cursor to home position
US B	1F 42	Move cursor to bottom position
CLR	0C	Clear display screen
CLR	12	
CR	0D	Carriage return
CAN	18	Clear cursor line, and clear string mode
DLE n	10 n	Display position n = 0 ~ 27h, for location.
ESC R n	1B 52 n	Select international character set (Refer *1)
ESC t n	1B 74 n	Select international code table (Refer *2)

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Refer*1. Select international character set (23h~7Eh) for command " ESC R n "

Parameter "n"		International font
Dec	Hex	
0	00h	U.S.A.
1	01h	France
2	02h	Germany
3	03h	U.K.
4	04h	Denmark I
5	05h	Sweden
6	06h	Italy
7	07h	Spain
8	08h	Japan
9	09h	Norway
10	0Ah	Denmark II

Refer*2. Select character code table (80h~FFh) by command "ESC t n"

Parameter "n"		Code table
Dec	Hex	
0	00h	CP-437 (USA, Standard Europe)
1	01h	Katakana (for Japan)
2	02h	CP-850 (Multilingual)
3	03h	CP-860 (Portuguese)
4	04h	CP-863 (Canadian-French)
5	05h	CP-865 (Nordic)
6	06h	Slawie
7	07h	Russian
8	08h	CP-737 (Greek)
9	09h	CP-852 (Hungary)
10	0Ah	CP-862 (Hebrew)
11	0Bh	CP-866 (Cyrillic)
12	0Ch	WCP-1251 (Cyrillic)
13	0Dh	WPC-1254 (Turkish)
14	0Eh	WCP-1255 (Hebrew)
15	0Fh	WCP-1257 (Baltic)
16	10h	WCP-1252 (West European Latin)

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17	11h	WCP-1253 (Greek)
18	12h	WCP-1250 (East European Latin)
19	13h	CP-858 (Multilingual + Euro Symbol)
20	14h	CP-864 (Arabic)
64	40h	CP-775 (Baltic)
65	41h	CP-857 (Turkish)
66	42h	ISO8859-7 (Greek)

5.4 ADM788 mode command list

Command	Code (Hex)	Function descriptions
CLR	0C	Clear display
CR	0D	Carriage return
SLE1	0E	Clear up line and move cursor to upper line left most end
SLE2	0F	Clear low line and move cursor to lower line left most end
DC0 n	10 n	Set period to upper line last n position $31h \leq n \leq 44h$
DC1 n	11 n	Set line blanking , n = 31h up line n = 32h low line
DC2 n	12 n	Clear line blanking , n = 31h up line n = 32h low line
SF1	1E	Clear field 1 and move cursor to field 1 fast position
SF2	1F	Clear field 2 and move cursor to field 2 fast position

5.5 AEDEX mode command list

Command	Code (Hex)	Function descriptions
! # 1CR	21 23 31 <i>data</i> x m 0D	Upper line display $0 \leq m \leq 20$
! # 2CR	21 23 32 <i>data</i> x m 0D	Bottom line display $0 \leq m \leq 20$
! # 4CR	21 23 34 <i>data</i> x m 0D	Upper line message scroll continuously $0 \leq m \leq 40$
! # 5CR	21 23 35 "hh:mm" 0D	Display time "hh:mm" = h ₁ h ₂ SP m ₁ m ₂ h ₁ = 0~2, h ₂ = 0~9, :=3Ah m ₁ = 0~6, m ₂ = 0~9
! # 6CR	21 23 36 <i>data</i> x m 0D	Upper line message scroll one pass $0 \leq m \leq 40$
! # 8CR	21 23 38 n m 0D	Change attention code $32 \leq n \leq 255$ $32 \leq m \leq 255$
! # 9CR	21 23 39 <i>data</i> x m 0D	Two line display $0 \leq m \leq 40$

5.6 UTC/P enhanced mode command list

Command	Code (Hex)	Function descriptions
SI	0F	Flashing text start
SO	0E	Flashing text stop
ESC u A ..CR	1B 75 41 <i>data</i> x m 0D	Upper line display $0 \leq m \leq 20$
ESC u B ..CR	1B 75 42 <i>data</i> x m 0D	Bottom line display $0 \leq m \leq 20$
ESC u D ..CR	1B 75 44 <i>data</i> x m 0D	Upper line message scroll continuously $0 \leq m \leq 40$
ESC u E ..CR	1B 75 45 "hh:mm" 0D	Display time '00' $\leq$ hh $\leq$ '23' '00' $\leq$ mm $\leq$ '59'
ESC u F ..CR	1B 75 46 <i>data</i> x m 0D	Upper line message scroll once pass
ESC u H ..CR	1B 75 48 n m 0D	Change attention code $32 \leq n \leq 255$ $32 \leq m \leq 255$
ESC u I ..CR	1B 75 49 <i>data</i> x m 0D	Two line display $0 \leq m \leq 40$
ESC RS CR	1B 0F 0D	Change to UTC standard mode

5.7 UTC/S standard mode command list

Command	Code (Hex)	Function descriptions
EOT n	04 n	Display Dimming n = 20h, 40h, 60h, FFh
BS	08	Back space
HT	09	Horizontal tab
LF	0A	Line feed
CR	0D	Carriage return
DLE n	10 n	Display position (n=0~27h, for location.)
DC1	11	Over write display mode
DC2	12	Vertical scroll mode
DC3	13	Cursor on
DC4	14	Cursor off
CAN	18	Clear to end of line
EM	19	Clear to end of display
FS	1C	Flashing text start
GS	1D	Flashing text end
US	1F	Reset display
RS	1E	Home and clear display
ESC d	1B 64	Change to UTC enhanced mode

5.8 CD5220 standard mode command list

Command	Code (Hex)	Function descriptions
ESC DC1	1B 11	Overwrite mode
ESC DC2	1B 12	Vertical scroll mode
ESC DC3	1B 13	Horizontal scroll mode
ESC QACR	1B 51 41 <i>data</i> x m 0D	Set the string display mode, write string to upper line $m \leq 20$
ESC QBCR	1B 51 42 <i>data</i> x m 0D	Set the string display mode, write string to lower line $m \leq 20$
ESC QDCR	1B 51 44 <i>data</i> x m 0D	Upper line message scroll continuously $m \leq 40$
ESC [D	1B 5B 44	Move cursor left
BS	08	Move cursor left
ESC [C	1B 5B 43	Move cursor right
HT	09	Move cursor right
ESC [A	1B 5B 41	Move cursor up
ESC [B	1B 5B 42	Move cursor down
LF	0A	Move cursor down
ESC [H	1B 5B 48	Move cursor to home position
HOM	0B	Move cursor to home position
ESC [L	1B 5B 4C	Move cursor to left-most position
CR	0D	Move cursor to left-most position
ESC [R	1B 5B 52	Move cursor to right-most position
ESC [K	1B 5B 4B	Move cursor to bottom position
ESC I x y	1B 6C x y	Move cursor to specified position $1 \leq x \leq 20$,row position $1 \leq y \leq 2$,column position
ESC @	1B 40	Initialize display
CLR	0C	Clear display screen , and clear string mode
CAN	18	Clear cursor line, and clear string mode
ESC * n	1B 2A n	Brightness adjustment $1 \leq n \leq 4$

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ESC & SOH n m [a (p1... pa)] x (m-n+1)	1B 26 01 n m [a(p1... pa)] x (m-n+1)	Define download characters. $32 \leq n \leq m \leq 255$ $1 \leq a \leq 5$ p1... p5 = row1... row5
ESC ? n	1B 3F n	Deletes download characters. $32 \leq n \leq m \leq 255$
ESC % n	1B 25 n	Select/cancel download character set. n = 0 , Cancel n = 1 , Select
ESC _ n	1B 5F n	Set cursor on/off n = 1 , cursor on n = 2 , cursor off
ESC f n	1B 66 n	Select international character set (Refer *1)
ESC c n	1B 63 n	Select code (Refer *2)

* Refer:

Refer*1. Select international character set (23h~7Eh) for command " ESC f n "

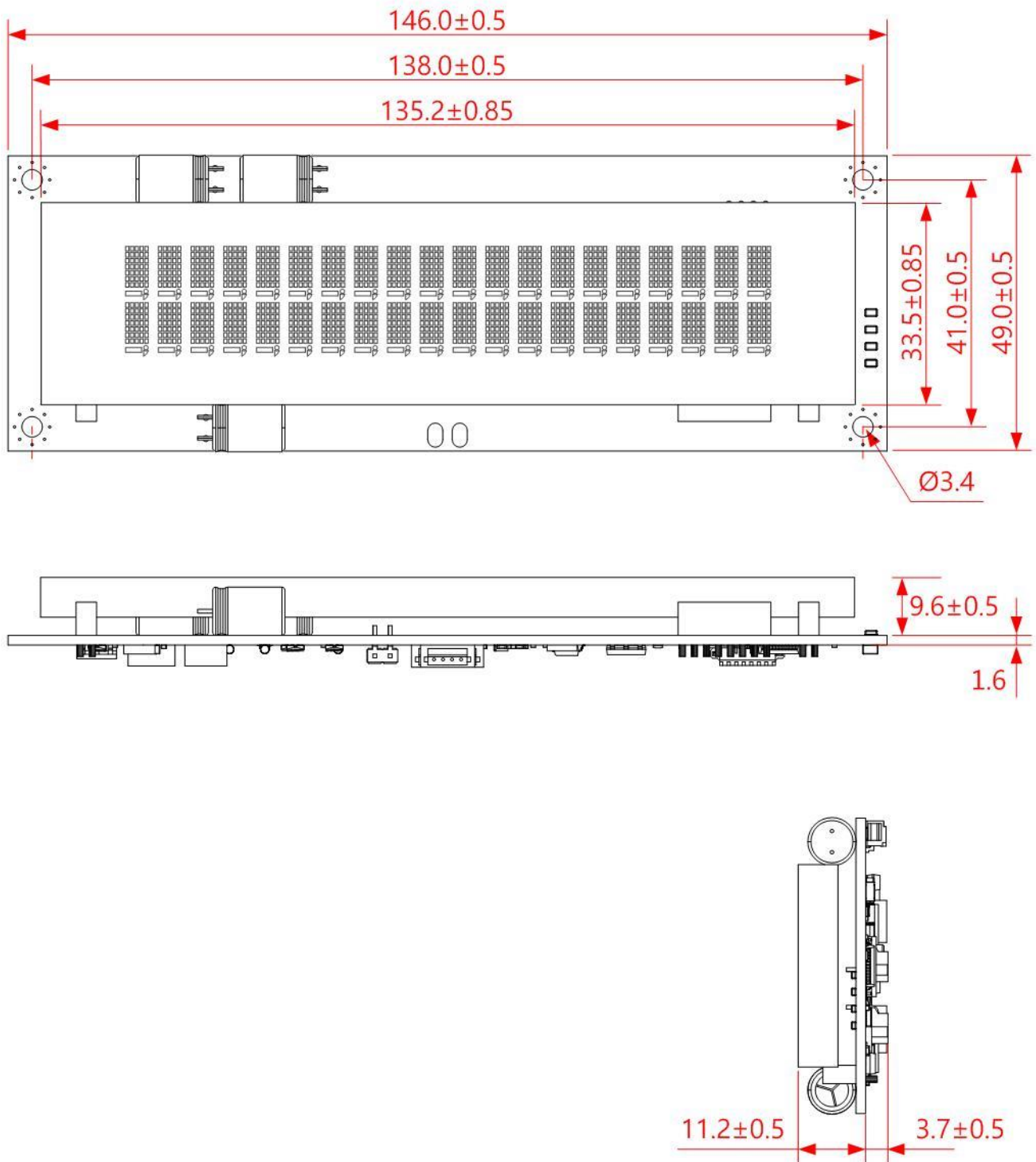
Parameter "n"		International font
Char	Hex	
"A"	41h	U.S.A.
"D"	44h	Denmark I
"E"	45h	Denmark II
"F"	46h	France
"G"	47h	Germany
"I"	49h	Italy
"J"	4Ah	Japan
"N"	4Eh	Norway
"S"	53h	Spain
"U"	55h	U.K.
"W"	57h	Sweden

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Refer*2. Select character code table (80h~FFh) for command " ESC c n "

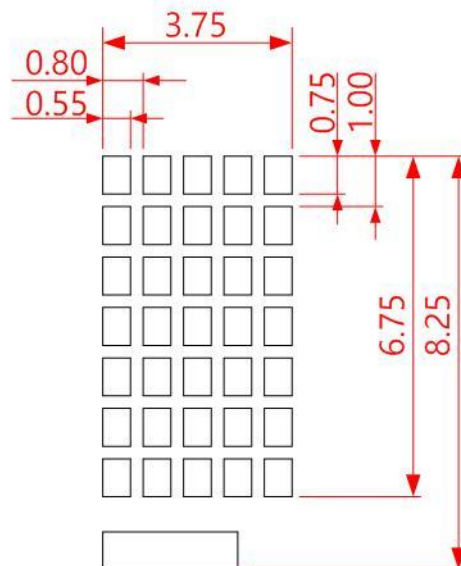
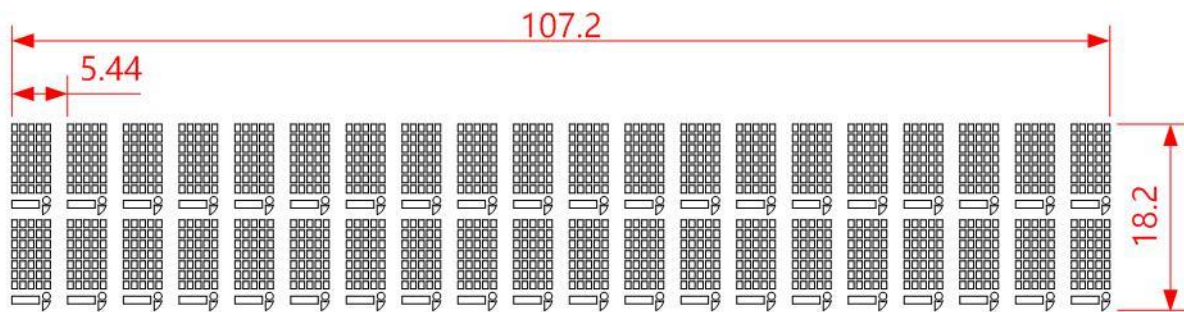
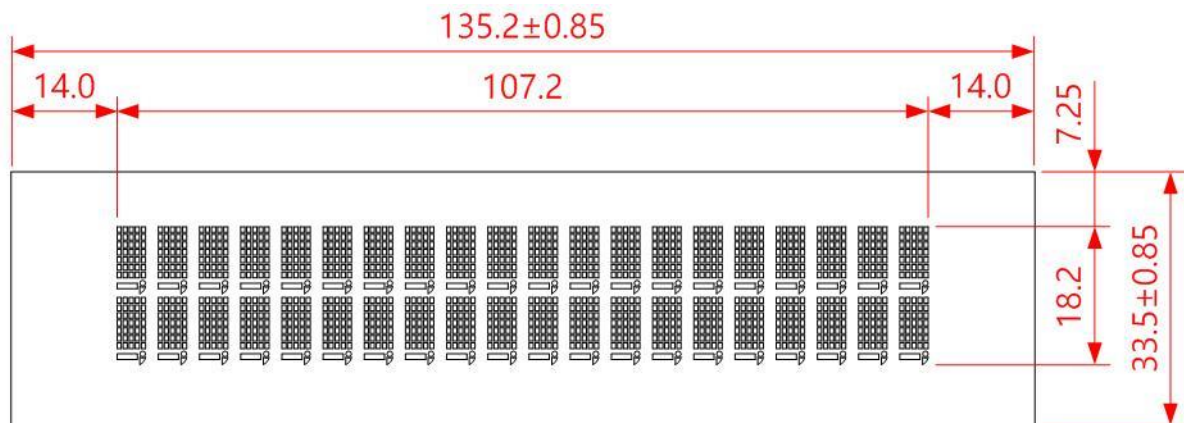
Parameter "n"		Code table
Char	Hex	
"A"	41h	CP-437 (USA, Standard Europe)
"J"	4Ah	Katakana (for Japan)
"M"	4Dh	CP-850 (Multilingual)
"p"	70h	CP-860 (Portuguese)
"F"	46h	CP-863 (Canadian-French)
"N"	4Eh	CP-865 (Nordic)
"L"	4Ch	Slawie
"R"	52h	Russian
"G"	47h	CP-737 (Greek)
"u"	75h	CP-852 (Hungary)
"H"	48h	CP-862 (Hebrew)
"C"	43h	CP-866 (Cyrillic)
"c"	63h	WCP-1251 (Cyrillic)
"h"	68h	WCP-1255 (Hebrew)
"B"	42h	WCP-1257 (Baltic)
"W"	57h	WCP-1252 (West European Latin)
"g"	67h	WCP-1253 (Greek)
"E"	45h	WCP-1250 (East European Latin)
"P"	50h	CP-858 (Multilingual + Euro Symbol)
"i"	69h	ISO8859-7 (Greek)
"t"	74h	CP-857 (Turkish)
"T"	54h	WPC-1254 (Turkish)
"b"	62h	CP-775 (Baltic)
"a"	61h	CP-864 (Arabic)

6. Display Module Dimensions



Unit: mm

7. Tube Dimensions



Unit: mm

Appendix A : Character Code Tables

A.1 International Character sets

Country	ASCII code (Hex)											
	23	24	40	5B	5C	5D	5E	60	7B	7C	7D	7E
U.S.A	#	\$	@	[	\	]	^	`	{		}	~
France	#	\$	à	°	ç	§	^	`	é	ù	è	¨
Germany	#	\$	§	Ä	Ö	Ü	^	`	ä	ö	ü	ß
U.K	£	\$	@	[	\	]	^	`	{		}	~
Denmark I	#	\$	@	Æ	Ø	Å	^	`	æ	ø	å	~
Sweden	#	¤	É	Ä	Ö	Å	Ü	é	ä	ö	å	ü
Italy	#	\$	@	°	\	é	^	ù	à	ò	è	ì
Spain	Pt	\$	@	¡	Ñ	¿	^	`	¨	ñ	}	~
Japan	#	\$	@	[	¥	]	^	`	{		}	~
Norway	#	¤	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü
Denmark II	#	\$	É	Æ	Ø	Å	Ü	é	æ	ø	å	ü

A.2 Characters: 00h to 7Fh

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
2_	<u>NBSP</u>	!	“	#	\$	%	&	‘	(	)	*	+	,	-	.	/
3_	0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
4_	@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
5_	P	Q	R	S	T	U	V	W	X	Y	Z	[	\	]	^	_
6_	`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
7_	p	q	r	s	t	u	v	w	x	y	Z	{		}	~	<u>NBSP</u>

A.3 Character Code Table List

Code Page: CP-437 (USA, Standard Europe)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
9_	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	¢	£	¥	Pt	f
A_	á	í	ó	ú	ñ	Ñ	ª	º	¿	¬	¬	½	¼	¡	«	»
B_																
C_	L	L	T	T	—	+	+	+	+	+	+	+	+	+	+	+
D_	⌌	⌌	⌌	⌌	⌌	⌌	⌌	⌌	⌌	⌌	⌌	⌌	⌌	⌌	⌌	⌌
E_	α	β	Γ	π	Σ	σ	μ	τ	Φ	Θ	Ω	δ	∞	ø	ε	∩
F_	≡	±	≥	≤			÷	≈	°	•	.	√	n	²	■	<u>NBSP</u>

Code Page: Katakana (for Japan)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9_								→	←	↑	↓	×	÷	±	≤	≥
A_	。	「	」	、	・	ヲ	ア	イ	ウ	エ	オ	カ	キ	ク	ケ	コ
B_	—	ア	イ	ウ	エ	オ	カ	キ	ク	ケ	コ	サ	シ	ス	セ	ソ
C_	タ	チ	ツ	テ	ト	ナ	ニ	ヌ	ネ	ノ	ハ	ヒ	フ	ヘ	ホ	マ
D_	ミ	ム	メ	モ	ヤ	ユ	ヨ	ラ	リ	ル	レ	ロ	ワ	ン	°	°
E_	□	■	■	○	●	◇	◆	◆	▶	◀	▲	▼	<<	>>	½	¼
F_	日	月	火	水	木	金	土	年	円	分	人	大	中	小	〒	℃

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Code Page: CP-850 (Multilingual)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
9_	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	ø	£	Ø	×	f
A_	á	í	ó	ú	ñ	Ñ	ª	º	¿	®	¬	½	¼	¡	«	»
B_	⌘	⌘	⌘		└	Á	Â	À	©	⌘	⌘	⌘	⌘	¢	¥	⌘
C_	L	⊥	⊥	└	—	⊥	ã	Ã	ℒ	ℒ	ℒ	ℒ	ℒ	=	ℒ	α
D_	ð	Ð	Ê	Ë	È	ı	Í	Î	İ	⌘	⌘	■	■	ı	İ	■
E_	Ó	ß	ô	Ò	õ	Õ	μ	þ	Þ	Ú	Û	Ù	ý	Ý	—	´
F_	—	±	=	¾	¶	§	÷	‚	°	¨	·	¹	³	²	■	<u>NBSP</u>

Code Page: CP-860 (Portuguese)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	Ç	ü	é	â	ã	à	Á	ç	ê	Ê	è	Í	Ô	ì	Ã	Â
9_	É	À	È	ô	õ	ò	Ú	ù	Ì	Õ	Ü	¢	£	Ù	Pt	Ó
A_	á	í	ó	ú	ñ	Ñ	ª	º	¿	Ò	¬	½	¼	¡	«	»
B_	⌘	⌘	⌘		└	└	└	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘
C_	L	⊥	⊥	└	—	⊥	⊥	⊥	ℒ	ℒ	ℒ	ℒ	ℒ	=	ℒ	±
D_	ℒ	ℒ	π	ℒ	ℒ	ℒ	π	⊥	⊥	⌘	⌘	■	■	■	■	■
E_	α	β	Γ	π	Σ	σ	μ	τ	Φ	Θ	Ω	δ	∞	ø	ε	∩
F_	≡	±	≥	≤	└	└	÷	≈	°	•	·	√	n	²	■	<u>NBSP</u>

WDM-M2027 VFD Module

Code Page: CP-863 (Canadian-French)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	Ç	ü	é	â	Â	à	¶	ç	ê	ë	è	ï	î	=	Ä	§
9_	É	È	Ê	ô	Ë	Ï	û	ù	œ	Ô	Ü	¢	£	Ù	Û	f
A_	¡	´	ó	ú	¨	,	³	—	Î	ƒ	¬	½	¼	¾	«	»
B_					┌	┐	└	┘	┌	┐	└	┘	┌	┐	└	┘
C_	L	└	┐	┌	—	┐	└	└	┐	┐	└	└	┐	=	└	┐
D_	┐	└	┐	┐	┐	┐	┐	┐	┐	┐	┐	■	■	■	■	■
E_	α	β	Γ	π	Σ	σ	μ	τ	Φ	Θ	Ω	δ	∞	ø	ε	∩
F_	≡	±	≥	≤	∫	∫	÷	≈	°	•	.	√	n	²	■	<u>NBSP</u>

Code Page: CP-865 (Noridc)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
9_	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	ø	£	Ø	Pt	f
A_	á	í	ó	ú	ñ	Ñ	ª	º	¿	ƒ	¬	½	¼	¿	«	œ
B_					┌	┐	└	┘	┌	┐	└	┘	┌	┐	└	┘
C_	L	└	┐	┌	—	┐	└	└	┐	┐	└	└	┐	=	└	┐
D_	┐	└	┐	┐	┐	┐	┐	┐	┐	┐	┐	■	■	■	■	■
E_	α	β	Γ	π	Σ	σ	μ	τ	Φ	Θ	Ω	δ	∞	ø	ε	∩
F_	≡	±	≥	≤	∫	∫	÷	≈	°	•	.	√	n	²	■	<u>NBSP</u>

WDM-M2027 VFD Module

Code Page: Slawie

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	Ç	ü	é	â	ä	û	ć	ç	ł	ë	õ	õ	î	ż	ä	ć
9_	é	Í	í	ô	ö	Ĺ	ĩ	ś	ś	Ö	Ü	ť	ť	ł	x	č
A_	á	í	ó	ú	ą	ą	ż	ż	ę	ę		ż	č	ş	«	»
B_					†	á	â	ě	ş					ţ	ţ	
C_					—	†	ă	ă						=		α
D_	đ	đ	ǎ	ë	ǎ	ň	í	î	ě					ţ	û	
E_	ó	β	ô	ń	ń	ň	š	š	ř	ú	ř	ũ	ý	ý	ţ	´
F_	—	”	‘	ˇ	ˇ	§	÷	„	°	¨	·	ũ	ř	ř		<u>NBSP</u>

Code Page: Russian

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	А	Б	В	Г	Д	Е	Ж	З	И	Й	К	Л	М	Н	О	П
9_	Р	С	Т	У	Ф	Х	Ц	Ч	Ш	Щ	Ъ	Ы	Ь	Э	Ю	Я
A_	а	б	в	г	д	е	ж	з	и	й	к	л	м	н	о	п
B_																
C_																
D_																
E_	р	с	т	у	ф	х	ц	ч	ш	щ	ъ	ы	ь	э	ю	я
F_	Θ	ƒ	Ɔ	Ҁ	Θ	Ƴ	Ҁ	h	ə	ƒ	Ɔ	Ҁ	ə	Ƴ	Ҁ	<u>NBSP</u>

WDM-M2027 VFD Module

Code Page: CP-737 (Greek)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	A	B	Γ	Δ	E	Z	H	Θ	I	K	Λ	M	N	Ξ	O	Π
9_	P	Σ	T	Υ	Φ	X	Ψ	Ω	α	β	γ	δ	ε	ζ	η	θ
A_	ι	κ	λ	μ	ν	ξ	ο	π	ρ	σ	ς	τ	υ	φ	χ	ψ
B_					┌	┐	└	┘	┙	┚	┛	├	┤	┥	┦	┧
C_	L	┐	└	┌	─	┼	┼	┼	┼	┼	┼	┼	┼	┼	┼	┼
D_	┼	┼	┼	┼	┼	┼	┼	┼	┼	┼	┼	┼	┼	┼	┼	┼
E_	ω	ά	έ	ή	ϊ	ί	ό	ύ	ϋ	ώ	Α	Ε	Η	Ι	Ο	Υ
F_	Ω	±	≥	≤	İ	ÿ	÷	≈	°	£	.	√	n	²	■	<u>NBSP</u>

Code Page: CP-852 (Hungary)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	Ç	ű	é	â	ä	ű	ć	ç	ł	ë	Ő	ő	î	Ž	Ä	Ć
9_	É	Í	í	ô	ö	Ĺ	ĺ	Ś	ś	Ö	Ü	Ť	ť	Ł	x	č
A_	á	í	ó	ú	Ą	ą	Ž	ž	Ę	ę	¬	ž	Č	ş	«	»
B_					┌	Á	Â	Ě	Ś	┘	┘	┘	┘	ž	ž	┘
C_	L	┐	└	┌	─	┼	Ă	ă	Ł	┘	┘	┘	┘	┼	┼	α
D_	đ	Đ	Ď	Ě	ď	Ň	í	î	ě	┘	┘	┘	┘	┘	Ů	■
E_	Ó	ß	Ô	Ń	ń	ň	Š	š	Ř	Ú	ř	Ů	ý	Ý	ţ	´
F_	—	”	„	˘	˘	§	÷	„	°	„	·	ű	Ř	ř	■	<u>NBSP</u>

WDM-M2027 VFD Module

Code Page: CP-862 (Hebrew)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	א	ב	ג	ד	ה	ו	ז	ח	ט	י	ך	כ	ל	ם	נ	ן
9_	ס	ע	פ	ק	ר	ש	ת	ץ	ף	ץ	ף	ץ	ף	ץ	ף	ץ
A_	א	א	א	א	א	א	א	א	א	א	א	א	א	א	א	א
B_	א	א	א	א	א	א	א	א	א	א	א	א	א	א	א	א
C_	א	א	א	א	א	א	א	א	א	א	א	א	א	א	א	א
D_	א	א	א	א	א	א	א	א	א	א	א	א	א	א	א	א
E_	א	א	א	א	א	א	א	א	א	א	א	א	א	א	א	א
F_	א	א	א	א	א	א	א	א	א	א	א	א	א	א	א	א

Code Page: CP-866 (Cyrillic)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	А	Б	В	Г	Д	Е	Ж	З	И	Й	К	Л	М	Н	О	П
9_	Р	С	Т	У	Ф	Х	Ц	Ч	Ш	Щ	Ъ	Ы	Ь	Э	Ю	Я
A_	а	б	в	г	д	е	ж	з	и	й	к	л	м	н	о	п
B_	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а
C_	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а
D_	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а
E_	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а
F_	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а	а

Code Page: WCP-1251 (Cyrillic)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	Ъ	Ѓ	,	ѓ	„	...	†	‡	€	‰	Љ	‹	Њ	Ќ	Ѝ	Ў
9_	ђ	‘	’	“	”	•	—			™	љ	›	њ	ќ	ћ	џ
A_	<u>NBSP</u>	Ў	ў	Ј	Ѡ	Ѓ	Ѕ	Ї	Љ	Є	«	¬	-	®	Ї	
B_	°	±	І	і	ѓ	μ	¶	·	ё	№	е	»	ј	ѕ	ѕ	ї
C_	А	Б	В	Г	Д	Е	Ж	З	И	Й	К	Л	М	Н	О	П
D_	Р	С	Т	У	Ф	Х	Ц	Ч	Ш	Щ	Ъ	Ы	Ь	Э	Ю	Я
E_	а	б	в	г	д	е	ж	з	и	й	к	л	м	н	о	п
F_	р	с	т	у	ф	х	ц	ч	ш	щ	ъ	ы	ь	э	ю	я

Code Page: WCP-1255 (Hebrew)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	€		,	f	„	...	†	‡	^	‰		‹				
9_		‘	’	“	”	•	—	—	~	™		›				
A_	<u>NBSP</u>	ı	¢	£	¤	¥	¦	§	¨	©	×	«	¬	-	®	¯
B_	°	±	²	³	´	μ	¶	·	¸	¹	÷	»	¼	½	¾	¿
C_	:	::	;	:::	.	..	...	-	τ	.		...	.	.	-	-
D_		◊	◊	:				'	''							
E_	א	ב	ג	ד	ה	ו	ז	ח	ט	י	ך	כ	ל	ם	נ	ן
F_	נ	ס	ע	ף	פ	ץ	צ	ק	ר	ש	ת			<u>NBSP</u>	<u>NBSP</u>	

Code Page: WCP-1257 (Baltic)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	€		,		„	...	†	‡		‰		‹		“	”	
9_		‘	’	“	”	•	—	—		™		›		—	‘	
A_	<u>NBSP</u>		¢	£	¤		¦	§	ø	©	ª	«	¬	-	®	Æ
B_	°	±	²	³	´	µ	¶	·	ø	¹	º	»	¼	½	¾	æ
C_	Ą	Į	Ā	Ć	Ä	Å	Ę	Ē	Č	É	Ž	Ė	Ġ	Ķ	Ī	Ļ
D_	Š	Ń	Ņ	Ó	Ō	Õ	Ö	×	Ų	Ł	Ś	Ū	Ü	Ž	Ž	ß
E_	ą	į	ā	ć	ä	å	ę	ē	č	é	ž	ė	ġ	ķ	ī	ļ
F_	š	ń	ņ	ó	ō	õ	ö	÷	ų	ł	ś	ū	ü	ž	ž	·

Code Page: WCP-1252 (West European Latin)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	€		,	f	„	...	†	‡	^	‰	Š	‹	Œ		Ž	
9_		‘	’	“	”	•	—	—	~	™	š	›	œ		ž	ÿ
A_	<u>NBSP</u>	ı	¢	£	¤	¥	¦	§	¨	©	ª	«	¬	-	®	¯
B_	°	±	²	³	´	µ	¶	·	,	¹	º	»	¼	½	¾	¿
C_	À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í	Î	Ï
D_	Ð	Ñ	Ò	Ó	Ô	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ	ß
E_	à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï
F_	ø	ñ	ò	ó	ô	õ	ö	÷	ø	ù	ú	û	ü	ý	þ	ÿ

Code Page: WCP-1253 (Greek)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	€		,	f	„	...	†	‡		‰		‹				
9_		‘	’	“	”	•	—	—		™		›				
A_	<u>NBSP</u>	™	À	£	¤	¥	¦	§	¨	©		«	¬	-	®	—
B_	°	±	²	³	´	µ	¶	·	¸	¹	º	»	¼	½	¾	Ω
C_	İ	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ	Ι	Κ	Λ	Μ	Ν	Ξ	Ο
D_	Π	Ρ		Σ	Τ	Υ	Φ	Χ	Ψ	Ω	Ϊ	Ϋ	ά	έ	ή	ί
E_	Ü	α	β	γ	δ	ε	ζ	η	θ	ι	κ	λ	μ	ν	ξ	ο
F_	π	ρ	ς	σ	τ	υ	φ	χ	ψ	ω	ϊ	ϋ	ό	ύ	ώ	

Code Page: WCP-1250 (East European Latin)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	€		,		„	...	†	‡		‰	Š	‹	Ś	Ť	Ž	Ž
9_		‘	’	“	”	•	—	—		™	š	›	ś	ť	ž	ž
A_	<u>NBSP</u>	˘	˘	Ł	¤	Ą	¦	§	¨	©	Ş	«	¬	-	®	Ż
B_	°	±	ˆ	ł	´	µ	¶	·	¸	¹	ş	»	¸	”	¸	ž
C_	Ř	Á	Â	Ă	Ä	Í	Ć	Ç	Č	É	Ę	Ě	Ě	Í	Î	Ď
D_	Đ	Ń	Ň	Ó	Ô	Õ	Ö	×	Ř	Ů	Ú	Ů	Ü	Ý	Ť	ß
E_	ř	á	â	ă	ä	í	ć	ç	č	é	ę	ě	ě	í	î	ď
F_	đ	ń	ň	ó	ô	õ	ö	÷	ř	ů	ú	ů	ü	ý	ţ	·

WDM-M2027 VFD Module

Code Page: CP-858 (Multilingual + Euro Symbol)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ì	Ä	Å
9_	É	æ	Æ	ô	ö	ò	û	ù	ÿ	Ö	Ü	ø	£	Ø	×	f
A_	á	í	ó	ú	ñ	Ñ	ª	º	¿	®	¬	½	¼	¡	«	»
B_	⋯	⋮	⋱		└	Á	Â	À	©	≡	≡	⌌	⌌	¢	¥	⌋
C_	ℒ	⊥	⊥	└	—	⊥	ã	Ã	ℒ	ℒ	ℒ	ℒ	ℒ	=	ℒ	α
D_	Š	Đ	Ê	Ë	È	€	Í	Î	Ï	⌋	⌋	■	■	¡	ì	■
E_	Ó	ß	Ô	Ò	õ	Õ	μ	þ	Þ	Ú	Û	Ù	ý	Ý	—	´
F_	—	±	=	¾	¶	§	÷	,	°	¨	·	¹	³	²	■	<u>NBSP</u>

Code Page: ISO8859-7 (Greek)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	€															
9_																
A_	<u>NBSP</u>	‘	’	£	€	Ð	¡	§	¨	©	.	«	¬	-		—
B_	°	±	²	³	´	µ	À	·	Έ	Ή	Ί	»	Ό	½	Υ	Ω
C_	ΐ	Α	Β	Γ	Δ	Ε	Ζ	Η	Θ	Ι	Κ	Λ	Μ	Ν	Ξ	Ο
D_	Π	Ρ		Σ	Τ	Υ	Φ	Χ	Ψ	Ω	ΐ	ΰ	ά	έ	ή	ί
E_	ϒ	α	β	γ	δ	ε	ζ	η	θ	ι	κ	λ	μ	ν	ξ	ο
F_	π	ρ	ς	σ	τ	υ	φ	χ	ψ	ω	ϊ	ϋ	ό	ύ	ώ	

WDM-M2027 VFD Module

Code Page: CP-857 (Turkish)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	Ç	ü	é	â	ä	à	å	ç	ê	ë	è	ï	î	ı	Ä	Å
9_	É	æ	Æ	ô	ö	ò	û	ù	İ	Ö	Ü	ø	£	Ø	Ş	ş
A_	á	í	ó	ú	ñ	Ñ	Ğ	ğ	¿	®	¬	½	¼	ı	«	»
B_	◌̇	◌̈	◌̉		┌	Á	Â	À	©	≡		⌋	⌌	ç	¥	⌋
C_	L	⊥	⊥	└	—	†	ã	Ã	ℒ	ℓ	≡	⌋	⌌	=	≡	α
D_	◌̇	◌̈	Ê	Ë	È	€	Í	Î	Ï	⌋	⌋	■	■	ı	İ	■
E_	Ó	ß	Ô	Ò	õ	Õ	μ		×	Ú	Û	Ù	ì	ÿ	—	‘
F_	-	±		¾	¶	§	÷	,	°	¨	.	1	3	2	■	<u>NBSP</u>

Code Page: WPC-1254 (Turkish)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	€		,	f	”	...	†	‡	^	‰	Š	‹	œ			
9_		‘	’	“	”	•	—	—	~	™	š	›	œ			ÿ
A_	<u>NBSP</u>	ı	ç	£	α	¥	ı	§	¨	©	ª	«	¬	-	®	—
B_	◌̇	±	2	3	‘	μ	¶	.	,	1	◌̇	»	¼	½	¾	¿
C_	À	Á	Â	Ã	Ä	Å	Æ	Ç	È	É	Ê	Ë	Ì	Í	Î	Ï
D_	Ğ	Ñ	Ò	Ó	Ô	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	İ	Ş	ß
E_	à	á	â	ã	ä	å	æ	ç	è	é	ê	ë	ì	í	î	ï
F_	ğ	ñ	ò	ó	ô	õ	ö	÷	ø	ù	ú	û	ü	ı	ş	ÿ

Code Page: CP-775 (Baltic)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	Ć	ü	é	ā	ä	ġ	å	ć	ł	ē	Ŕ	ŗ	ī	Ž	Ä	Å
9_	É	æ	Æ	ō	ö	Ģ	č	Š	ś	Ö	Ü	ø	£	Ø	×	¤
A_	Ā	Ī	ó	Ž	ž	ž	”		Ċ	Ė	¬	½	¼	Ł	«	»
B_	▒	▒	▒		┌	Ą	Č	Ę	Ė	⌌	⌌	⌌	⌌	Į	Š	┐
C_	Ł	┌	┐	┐	—	┐	Ų	Ū	Ł	┐	┐	┐	┐	=	┐	Ž
D_	ą	č	ę	ė	į	š	ų	ū	ž	┐	┐	■	■	■	■	■
E_	Ó	ß	Ō	Ń	õ	Õ	μ	ń	Ų	ķ	Ł	ł	ņ	Ē	Ņ	'
F_	-	±	“	¾	¶	§	÷	”	°	.	.	1	3	2	■	<u>NBSP</u>

Code Page: CP-864 (Arabic)

	_0	_1	_2	_3	_4	_5	_6	_7	_8	_9	_A	_B	_C	_D	_E	_F
8_	°	.	.	√	▒	—		┐	┐	┐	┐	┐	┐	┐	┐	┐
9_	β	∞	φ	±	½	¼	≈	«	»	لأ	لأ			لا	لا	
A_	<u>NBSP</u>	-	آ	£	¤	أ		€	ا	ب	ت	ث	،	ج	ح	خ
B_	٠	١	٢	٣	٤	٥	٦	٧	٨	٩	ف	؛	س	ش	ص	؟
C_	¢	ء	آ	أ	ؤ	ع	ئ	ا	ب	ة	ت	ث	ج	ح	خ	د
D_	ذ	ر	ز	س	ش	ص	ض	ط	ظ	ع	غ	ا	ـ	÷	×	ع
E_	-	ف	ق	ك	ل	م	ن	هـ	و	ى	ي	ض	ع	غ	غ	م
F_	ـ	ـ	ن	هـ	هـ	ى	ي	غ	ق	لأ	لأ	ل	ك	ي	■	