

Short Form Specification

Beck Compact Module BCM12X03-R RGB/DVI



September 2022

Preliminary

The information given in this document is carefully checked and believed to be reliable. However, Beck GmbH & Co. Elektronik Bauelemente KG takes no responsibility for any failure or product damage caused by application of this information. Please check all connections carefully with the product specification.

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This specification is subject to change without notification.

1. General Features

Item	Description	Unit
Diagonal	30.7 (12.1")	mm
Active area	245.76 (H) x 184.32 (V)	mm
Resolution – display	1024 x 768	pixel
Resolution – controller	640 x 480 – 1024 x 768	pixel
Pixel pitch	0.240 (H) x 0.240 (V)	mm
Pixel arrangement	R.G.B. vertical stripe	
Display colors	16.2 M	colors
Display mode	normally black	
Brightness	600	cd/m ²
Contrast ratio	1000:1	
Viewing angle	89 / 89 / 89 / 89	deg.
Response time	25	msec
LED Backlight life	min 50,000	hrs
Interface	Analog-RGB H-Sync. / V-Sync. // DVI	
Touch	Not available	
Power input voltage	12	V DC
Power consumption	15	W
Dimension	260.5 x 204.0 x 17.6	mm
Weight	800	gram
VPE	10	
Remark	wide view (AAS), high brightness	

2. Input Connectors

Power Connector
Molex: 43650-0212



Pin	Signal	Description	Type
1	GND	Ground	GND
2	VIN	12V power input	PWR

DVI Connector (J1)
Yeonho: 20022WR-13



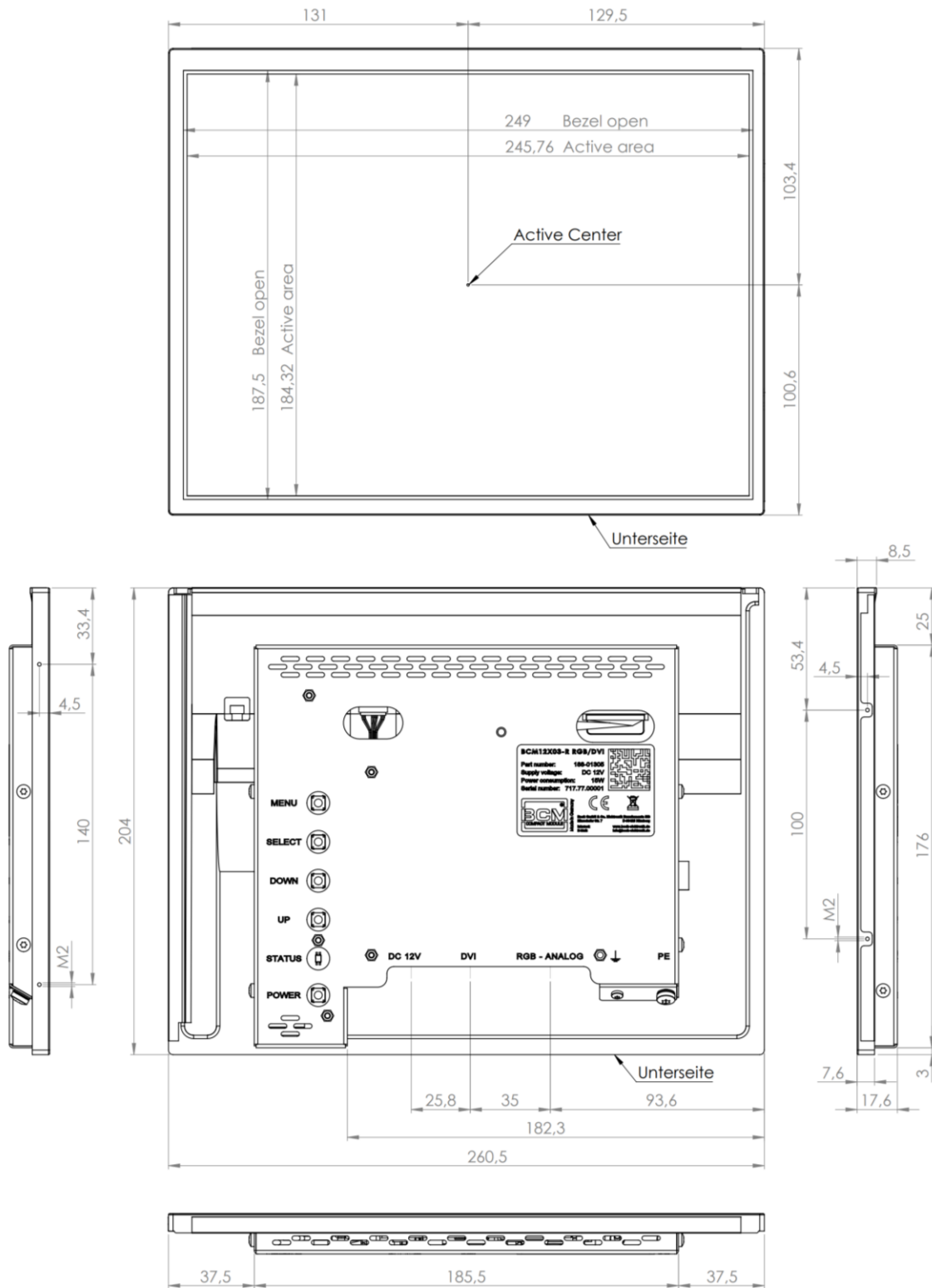
Pin	Signal	Description	Type
1	SDA	DDC data	I/O
2	SCL	DDC clock	I/O
3	D2+	T.M.D.S. Data2+	I
4	D2-	T.M.D.S. Data2-	I
5	GND	T.M.D.S. Data2 shield	GND
6	D1+	T.M.D.S. Data1+	I
7	D1-	T.M.D.S. Data1-	I
8	GND	T.M.D.S. Data1 shield	GND
9	D0+	T.M.D.S. Data0+	I
10	D0-	T.M.D.S. Data0-	I
11	GND	T.M.D.S. Data0 shield	GND
12	RXC+	T.M.D.S. Clock+	I
13	RXC-	T.M.D.S. Clock-	I

VGA Connector (J2)
Yeonho: 20022WR-13



Pin	Signal	Description	Type
1	AHS	Horizontal sync	I
2	GND	Ground	GND
3	AVS	Vertical sync	I
4	GND	Ground	GND
5	B0+	Blue signal	I
6	B0-	Blue ground	I
7	G0+	Green signal	I
8	G0-	Green ground	I
9	R0+	Red signal	I
10	R0-	Red ground	I
11	SCL	DDC clock	I/O
12	SDA	DDC data	I/O
13	n.c.	-	n.c.

Figure 1: Mechanical Outlines



3. Handling & Cautions

Cautions when taking out the module

- Pick the pouch only, when taking out module from a shipping package.

Cautions for handling the module

- As the electrostatic discharges may break the LCD module, handle the LCD module with care. Peel a protection sheet off from the LCD panel surface as slowly as possible.
- As the LCD panel and backlight element are made from fragile glass material, impulse and pressure to the LCD module should be avoided.
- As the surface of the polarizer is very soft and easily scratched, use a soft dry-cloth without chemicals for cleaning.
- Put the module display side down on a flat horizontal plane.
- Handle connectors and cables with care.

Cautions for the atmosphere

- Dewdrop atmosphere should be avoided.
- Do not store and/or operate the LCD module in a high temperature and/or humidity atmosphere. Storage in an electro-conductive polymer-packing pouch and under relatively low temperature atmosphere is recommended.

Cautions for the module characteristics

- Do not apply fixed pattern data signal to the LCD module at aging time.
- Applying fixed pattern for a long time may cause image sticking.

Other cautions

- Do not disassemble and/or re-assemble LCD module.
- Do not re-adjust variable resistor or switch etc.
- When returning the module for repair or etc., please pack the module not to be broken. We recommend on using the original shipping packages.

4. Packing Information

Each of the ten BCM12X03-R RGB/DVI is packed into an anti-static foil. These ten units of BCM12X03-R RGB/DVI are packed into a carton filled and cushioned with shock absorbing carton and therefore good protected for shipping on euro pallet.

5. Optional Accessories

We refer to our webpage:

<https://www.beck-elektronik.de/produkte/displays/beck-compact-module/>

We offer a wide variety of optional accessories to operate the BCM12X03-R RGB/DVI.