

TOTOKU

2 Megapixel
19.6" Color LCD

CCL230

CCL Series

19.6" color highbrightness LCD

High luminance, high contrast, and wide viewing angle provided by the IPS panel
Stable luminance for a long period of time with a unique built-in luminance stabilizing circuit

Flat Display System for Medical Imaging



2

Megapixel
Color Display

ECR2013 Preview
Estimated Q2 2013 Release

19.6"

Display/Port
& Digital

High
luminance
700cd/m²

Contrast
800:1

Calibration
function

10Bit
LUT

Internal
Power
Supply

Features :

- ▶ **Color calibration function to reproduce colors faithful to the original and grayscale compliant with DICOM Part 14**
By calibrating color temperature, luminance, and gamma characteristics, reproduction of colors consistent to the original and smooth display of grayscale are possible. (A calibration kit is required.)
- ▶ **Built-in 10bit LUT (Look-up Table) to reproduce stunning grayscale**
The built-in LUT selects the most appropriate 256 shades of gray (8bit) out of 1021 shades (10bit) to realize finer and smoother grayscale.
- ▶ **Luminance stabilization system λ-Sentinel for stable display of medical images**
Automatically corrects luminance fluctuation due to startup drift, temperature change, and aging to provide stable luminance.
- ▶ **Excellent image quality provided by the IPS panel**
The IPS panel effectively prevents color and contrast changes caused by different viewing angles.
- ▶ **Worldwide medical safety standards**
This display is certified under various medical safety standards that are much more demanding than those for general-purpose IT equipment.
- ▶ **Medivisor Series software (Optional)**
The Medivisor Series software offers collective support for display quality control and delivers high-quality and stable medical images while reducing display quality management costs.

Specifications

Model Name		CCL230
LCD Panel	Technology	19.6-inch Active Matrix IPS Technology
	Display Area	398.4mm X 298.8mm
	Pixel Pitch	0.294mm X 0.294mm
	Contrast Ratio	800:1 (Typ.)
	Maximum Luminance	700cd/m ² (calibrated to 410cd/m ² and 300cd/m ² , 410cd/m ² by factory default)
Visual Performance	Viewing Angle	170° vertical and horizontal
	Available Resolution	1600 x 1200
	Grayscale	10bit(1021) grayscale to 8bit(256) grayscale
Input Signal	Color Display	Full color (16.77million colors)
	Input Sync Signal	Digital DVI / DisplayPort
Input Power Supply	Plug and Play	DDC2B compliant
	Input	100V ~ 240V (±10%) 50/60Hz (Internal power supply)
Features	Maximum Power Consumption	N/A
	Calibration Control	Luminance, Gamma, Color temperature
Approvals	UL60601-1, CSA C22.2 N601.1 Part1, FCC Part15 Subpart J Class B, DOC Class B, MDD/CE (EN5011, EN60601-1-2), VCCI Class B	
Physical Characteristics	Dimensions (incl. tilt stand)	N/A
	Weight	N/A
	Tilt stand	Tilt, Swivel, Portrait / Landscape
	Mount	100mm VESA mounting
	Security Slot	Antitheft security slot
Accessories	Power cord (3P), DVI cable, Operation manual	

TOTOKU has obtained ISO14001 and ISO9001/ISO13485 certification which are international standards concerning environment management and quality control respectively.



Safety Precautions

Please read the user's manual for safe and proper use.

Do not expose the product to dust, moisture, steam, or oily smoke. It could cause fire, electric shock, or a failure.

TOTOKU

TOTOKU

Intelligent Devices and Solutions Dept. Sales and Marketing Division.
TOTOKU ELECTRIC CO., LTD.

1-11, Shinbashi 6-Chome, Minato-ku, Tokyo, 105-0004, Japan
TEL: +81 3-5860-2132 FAX: +81 3-5860-2137

USA
TOTOKU NORTH AMERICA, INC
401 E. Corporate Drive, Suite 100
Lewisville, TX 75057 U.S.A.
TEL : +1-469-948-4839
E-mail : info@totoku-na.com

EUROPE
TOTOKU Business Unit
Jakob-Krebs Strasse 124
47877 Willich Germany
TEL : +49 2156-496880
E-mail : info@totoku.eu

ASIA
TOTOKU ELECTRIC CO., LTD.
1-11, Shinbashi 6-Chome,
Minato-ku, Tokyo, 105-0004, Japan
TEL : +81-3-5860-2132
E-mail : info-idsc@totoku.co.jp

Additional product information is available at <http://www.totoku.com/display/>

*Microsoft and Windows are trademarks of the US Microsoft Corporation and are registered in the US and other countries. *Company names and product names are the trademarks or registered trademarks of the respective companies. *Product specifications and appearance are subject to change without notice. *Colors in photographs may differ from actual colors due to the printing process. *Images on screens are simulated.

Please contact the distributor below with inquiries and orders.