

Flat Panel Displays

FLAT PANEL DISPLAY

A flat panel display is an LCD monitor -Contec's displays all have touch screen functionality.

Contec offers mounting options for most applications including panel or wall mount, open frame displays for embedded applications and VESA-standard arm or desk mounting units.

Contec's displays are ideal for information terminal applications and are designed to provide effortless integration with box or chassis-style computers.



The thin-line design of Contec displays makes them easy to mount into control panel doors or to incorporate into OEM equipment.

Product Lineup

Contec offers a variety of models to choose from. Options include installation style, screen size and input interface.

DVI & Analog RGB input type

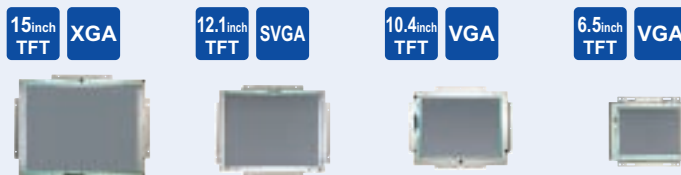
IPC-DT 61 series - Panel Mount Displays

C-03



IPC - DT 65 series - Open-frame for embedding

C-03



Analog RGB input

IPC-DT 20 series - Panel Mount Displays

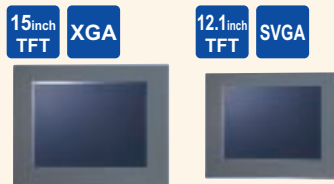
C-05



Panel Link input

IPC-DT 40 series - Panel Mount Displays

C-06



Pictograms

Input interface



Video input interface styles

Screen size



The size and the style of display

Resolution



Indicates the screen resolution
XGA : 1,024 × 768
SVGA : 800 × 600
VGA : 640 × 480

Touch-panel



Indicates that touch-panel operation is supported. Touch-panel signals will be transmitted to PC through USB or RS-232C connection.

With CONTEC BOX-PCs and chassis systems that support DVI or panel-link output, touch-panel signals and video signals can be transmitted through a single DVI / panel-link cable.

Dust- / Drip-proof



Dust/drip-proof performance of the front side when properly mounted

IP65-Compliance

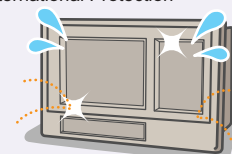
Indicates the level of dust-proof and drip-proof performance of the PC front side.

IP 65

Ensures protection against water sprayed at low pressure from every angle.

Ensures complete protection against dust

Abbreviation of International Protection



Flat Panel Displays

Host Computers

Connection Method

1

DVI

BOX computer
SBC chassis system

1

DVI cable

Video signals and touch-panel signals are transmitted through a single cable.



DVI-D cable

2m : IPC-DVI/D-020
5m : IPC-DVI/D-050

2

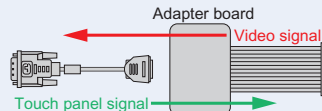
PANEL LINK

SBC chassis system

2

Panel-link to DVI conversion cable and adapter board

Video signals and touch-panel signals are transmitted through a single cable.



Panel Link to DVI cable

2m : IPC-PLDVI-020
5m : IPC-PLDVI-050



ADP-6940	ADPLNK(PC)H
CONTEC SBCs	CONTEC SBCs
SPI-6941-LV	SIS-8601-LVA
SPI-6940-LLVA	SIS-8600-LV
	SNL-4401-LVA

3

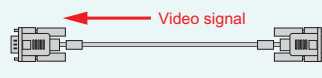
ANALOG RGB

BOX computer
SBC chassis system
Personal computer

3

Analog RGB cable and COM (or USB) cable

Video signals and touch-panel signals are transmitted separately by their respective cables.



Analog RGB cable (15-pin HD-SUB)

Commercially available



COM cable for touch signal

2m : IPC-CBL3-2
5m : IPC-CBL3-5

USB cables for touch panel signal are commercially available.

4

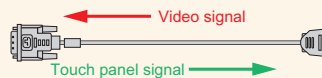
DVI

BOX computer
SBC chassis system

4

DVI to panel-link conversion cable

Video signals and touch-panel signals are transmitted through a single cable.



DVI to Panel Link cable

2m : IPC-DVIPL-020
5m : IPC-DVIPL-050

5

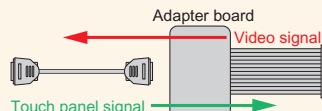
PANEL LINK

SBC chassis system

5

Panel-link cable and adapter board

Video signals and touch-panel signals are transmitted through a single cable.



Panel link cable

2m : IPC-PL2020-020
5m : IPC-PL2020-050



ADP-6940	ADPLNK(PC)H
CONTEC SBCs	CONTEC SBCs
SPI-6941-LV	SIS-8601-LVA
SPI-6940-LLVA	SIS-8600-LV
	SNL-4401-LVA

news box

CONTEC SOLUTION

Company Profile

Box PCs

Panel PCs

Flat Panel Displays

Silicon Disk Drive

Options

Box PCs & Panel PCs with Windows CE

Analog I/O

Digital I/O

Counters & Motor Controls

Communication

GPIO

Remote I/O

Bus Expansion System

Software

Accessories & Cables

Distributed Monitor & Control Network: F&EIT
Multi-Programmable Display

Remote Monitoring Solution

Service & Products

C-02

IPC-DT 61

IPC-DT 65

IPC-DT 20

IPC-DT 40

IPC-DT 440

IPC-DT 400

IPC-DT 30

*For the compatibility status of our box computers and SBCs with our flat panel displays, please see individual product specifications

Flat Panel Displays

High definition & long cable, DVI Input correspondence
Compact & Slim Design

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- Multi-Programmable Display
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C-03

- IPC-DT 61
- IPC-DT 65**
- IPC-DT 20
- IPC-DT 40
- IPC-DT 440
- IPC-DT 400
- IPC-DT 30

IPC-DT 61 Series

**Panel-Mount DVI & Analog RGB
 Dual Input Supported**

DVI Analog RGB Touch Panel IP65

			
NEW 15inch TFT XGA	NEW 12.1inch TFT SVGA	NEW 10.4inch TFT VGA	NEW 6.5inch TFT VGA
15" TFT color XGA (1024 × 768)	12.1" TFT color SVGA (800 × 600)	10.4" TFT color VGA (640 × 480)	6.5" TFT color VGA (640 × 480)
IPC-DT/H61XT-DC1	IPC-DT/L61SVT-DC1	IPC-DT/M61VT-DC1	IPC-DT/S61VT-DC1
Manual and touch-panel drivers are available on CD-ROM or you can download them for free from our Web site.			For Dimensions see Page C-07

IPC-DT 65 Series

**Open Frame DVI & Analog RGB
 Dual Input Supported**

DVI Analog RGB Touch Panel IP65

			
NEW 15inch TFT XGA	NEW 12.1inch TFT SVGA	NEW 10.4inch TFT VGA	NEW 6.5inch TFT VGA
15" TFT color XGA LCD (1024 × 768)	12.1" TFT color SVGA LCD (800 × 600)	10.4" TFT color VGA LCD (640 × 480)	6.5" TFT color VGA LCD (640 × 480)
IPC-DT/H65XT-DC1	IPC-DT/L65SVT-DC1	IPC-DT/M65VT-DC1	IPC-DT/S65VT-DC1
Manual and touch-panel drivers are available on CD-ROM or you can download them for free from our Web site.			For Dimensions see Page C-07

Features

- General-purpose analog RGB compliant input. RS-232C or USB*1 cable can be used for touch screen connection
- Auto-scaling function adjusts the input screen size to fit the LCD configuration
- On-screen display setup for easy screen adjustment
- Dual input system (×1 analog RGB input and ×1 DVI-D input) allows a display to be connected to ×2 computers at the same time switching by using OSD. Both computers cannot use the display at the same time.
- IP65-compliant dustproof/waterproof front panel *2
- A optional stand is available for desktop use*2
- Power input has a protective bracket to prevent the AC adapter cord from being accidentally disconnected.
- USB multi touch-panel configuration
 Running the RGB signal of the host computer through a video splitter allows the signal to be received on multiple displays. Running the touchpanel signal through a USB hub allows the touch panel operation to be supported on all displays. Multi-display touch panel configuration is not supported in RS-232C connections.

*1: USB Touch Panel option only available under Windows XP/2000/98SE.
 *2: Only available with the Embedded type.
 *3: When a panel computer is used as host computer, a maximum of seven additional displays are supported.

Flat Panel Displays

news box

CONTEC SOLUTION

Company Profile

Box PCs

Panel PCs

Flat Panel Displays

Silicon Disk Drive

Options

Box PCs & Panel PCs with Windows CE

Analog I/O

Digital I/O

Counters & Motor Controls

Communication

GPIB

Remote I/O

Bus Expansion System

Software

Accessories & Cables

Distributed Monitor & Control Network: F&EIT

Multi-Programmable Display

Remote Monitoring Solution

Service & Products

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IPC-DT 61

IPC-DT 65

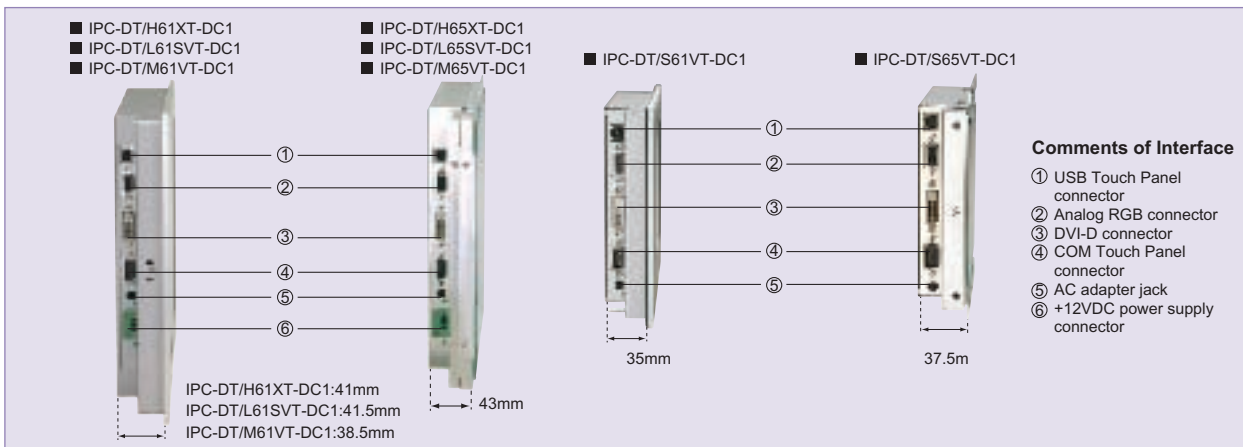
IPC-DT 20

IPC-DT 40

IPC-DT 440

IPC-DT 400

IPC-DT 30



Specifications

Model	IPC-DT/H61XT-DC1 IPC-DT/H65XT-DC1	IPC-DT/L61SVT-DC1 IPC-DT/L65SVT-DC1	IPC-DT/M61VT-DC1 IPC-DT/M65VT-DC1	IPC-DT/S61VT-DC1 IPC-DT/S65VT-DC1
Enclosure	Full enclosure for Panel or Desktop mounting *1			
Screen Size	15"	12.1"	10.4"	6.5"
Resolution	1024 × 768	800 × 600	640 × 480	
Display type	TFT Color LCD			
Number of Colors	16,777,216	262,144		
Screen Control	Automatic adjustment (display positioning and scaling) IPC-DT61 series: Manual adjustment by using the front switch IPC-DT65 series: Manual adjustment by using the rear switch			
Brightness Control	Manually control via software from the host computer IPC-DT61 series: Control by using the front switch IPC-DT65 series: Control by using the rear switch			
Backlight Control	On or off via OSD switch or via software control from the host computer			
Display I/F	Analog RGB input HD-SUB 15 pin (female) connector / DVI-D input 24 pin DVI (female) connector			
Incoming Signal	Separate RGB, analog, positive polarity: 0.7Vp-p/75 ohms Separate V/H, TTL, positive/negative polarity Horizontal: 31 to 80kHz, vertical: 56 to 75Hz			
Analog RGB input	Digital RGB (TMDS compliant)			
DVI-D input	5mm or less (Recommended)			
Cable Length	4,096 × 4,096			
Touch Panel	Analog resistive			
Resolution	One million repeated touches (silicon rubber load of 3 N)			
Detection Method	Connect to the host computer using either USB*2 or RS-232C			
Touch Life Expectancy	USB: USB1.1-compliant, Type-B Connector RS-232C: 9pin D-SUB (Male) Connector			
Touch Panel I/F	3-pin terminal block for the AC power supply *3			
Power Supply connector	+12VDC±5%, 2.5A (Max.)			
Power Consumption	+12VDC±5%, 1.6A (Max.)	+12VDC±5%, 1.4A (Max.)	+12VDC±5%, 1.3A (Max.)	
Operating Temp. / Storage Temp. / Humidity	0~50°C (0°C to 40°C when using an AC switching adapter [IPC-ACAP12-01]) / -10~60°C / 10~90%RH (20~80%RH when using AC adapter [IPC-ACAP12-01]) (no condensation)			
Front Panel Protection	Not excessive / None			
Floating Dust Particles / Corrosive Gases	IPC-DT series: IP65-compliant IPC-DT65 series: IP65-compliant (using attached packing)			
Dimensions (mm)	359(W) × 41(D) × 284(H)	302(W) × 41.5(D) × 242(H)	291(W) × 38.5(D) × 226(H)	198(W) × 35(D) × 154(H)
(Depth inside)	IPC-DT/H61XT-DC1: 382(W) × 45(D) × 294(H)	IPC-DT/L61SVT-DC1: 318(W) × 43(D) × 252(H)	IPC-DT/M61VT-DC1: 292(W) × 43(D) × 234(H)"	IPC-DT/S61VT-DC1: 192(W) × 37.5(D) × 166(H)"
Weight	IPC-DT/H61XT-DC1: 3.9kg IPC-DT/H65XT-DC1: 3.6kg	IPC-DT/L61SVT-DC1: 2.9kg IPC-DT/L65SVT-DC1: 2.6kg	IPC-DT/M61VT-DC1: 2.6kg IPC-DT/M65VT-DC1: 2.2kg	IPC-DT/S61VT-DC1: 1.3kg IPC-DT/S65VT-DC1: 1.0kg

*1: Optional stand [IPC-SND-03] for desktop installation.
 *2: USB Touch Panel option is only available under Windows XP/2000/98SE.
 *3: An optional AC adapter [IPC-ACAP12-01] can be used for 100 to 240VAC input.

Options

Name	Description
Screen Protective Seal	
IPC-CV6	Protective seals for 6.4-inch display (10pcs)
IPC-CV	Protective seals for 10.4-inch display (10pcs)
IPC-CV12	Protective seals for 12.1-inch display (10pcs)
IPC-CV15	Protective seals for 15-inch display (10pcs)
Cable	
IPC-DVI/D-020	DVI-D cable (2m)
IPC-DVI/D-050	DVI-D cable (5m)
IPC-PLDVI-020	Panel link to DVI-D conversion cable (2m)
IPC-PLDVI-050	Panel link to DVI-D conversion cable (5m)

Name	Description
Cable	
IPC-CBL3-2	Touch panel COM cable (2m)
IPC-CBL3-2	Touch panel COM cable (5m)
Driver	
IPC-SLIB-01	Driver & Utility software (CD-ROM)
Others	
IPC-DT/61-HME	English manual of IPC-DT 61 series
IPC-DT/65-HME	English manual of IPC-DT 65 series
IPC-SND-03	Desk stand
IPC-ACAP12-01	+12VDC output AC adapter

Flat Panel Displays

IPC-DT 20 Series

Panel Mount Flat Panel Display for Analog RGB

IPC-DT/M20V(PC)T
10.4" TFT color LCD VGA (640 × 480)



IPC-DT/L20S(PC)T
12.1" TFT color LCD SVGA (800 × 600)



IPC-DT/H20X(PC)T
15" TFT color LCD XGA (1024 × 768)



IPC-DT/H20X(PC)T

For Dimensions see Page C-07

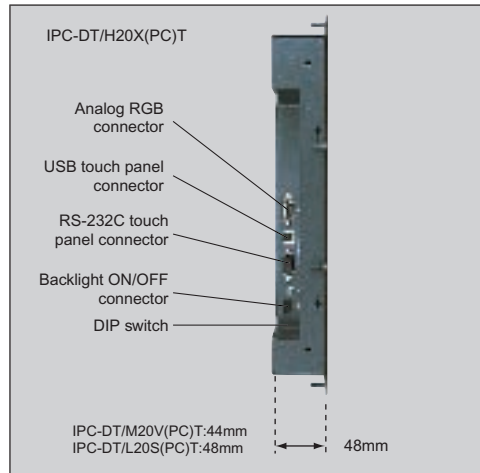
Manual and touch-panel drivers are available on CD-ROM or you can download them for free from our Web site.

Features

- General-purpose analog RGB compliant input. RS-232C or USB cable can be used for touch panel connections
- Auto-scaling function adjusts the input screen size to fit the LCD configuration
- On-screen display setup for easy screen adjustment
- IP65-compliant dustproof/waterproof front panel
- An optional stand kit is available for desktop use
- When using the USB touch panel interface, up to 8 units can be used with one host PC in a multi-touch panel configuration*

* Please refer to Page C-08 for configuration

Interfaces



SPECIFICATIONS

Model	IPC-DT/M20V(PC)T	IPC-DT/L20S(PC)T	IPC-DT/H20X(PC)T
Enclosure	Full enclosure for Panel or Desk Mounting		
Screen size	10.4"	12.1"	15"
Resolution	640 × 480	800 × 600	1024 × 768
Display type	TFT Color LCD		
Number of Colors	262,144		16,777,216 colors
Brightness Control	Adjustment via a front switch or software control from the host computer		
Backlight control	On or off via front switch, software control from the host computer or input from rear connector		
Display I/F	Analog RGB input HD-SUB 15-pin (Female) connector *3		
Picture signal	RGB separation, Analog, Positive polarity 0.7Vp-p/75Ω		
Synchronized signal	V/H separation, TTL, Positive/Negative polarity		
Scan frequency	Horizontal: 31~38kHz; Vertical: 60~72Hz	Horizontal: 31~48kHz; Vertical: 56~72Hz	Horizontal: 31~60kHz; Vertical: 56~75Hz
Touch panel			
Resolution	4,096 × 4,096		
Detection method	Analog resistive		
Touch life expectancy	One million repeated touches (silicon rubber load of 3 N)		
Touch panel I/F	Connect to the host computer by either RS-232C (9-pin D-type female connector) or USB*1*2 (Type-B connector).		
Power Consumption (Max.)	+12VDC ± 5%, 1.3A		+12VDC ± 5%, 1.8A
Operating temp. / Storage temp. / Humidity	0~50°C / -10~60°C / 10~90%RH (20~80%RH when using AC adapter [IPC-ACAP12-01]) (no condensation)		
Floating Dust Particles / Corrosive Gases	Not be excessive / None		
Front panel protection	IP65 compliant		
Dimensions (mm)	317(W) × 277(H) × 44(D)	370(W) × 307(H) × 48(D)	428(W) × 336(H) × 48(D)
Weight	3.5kg	4.4kg	5.5kg

*1: USB touch panel interface is only supported by Windows XP/2000/98SE.

Options

Name	Description
Screen Protective Seal	
IPC-CV	Protective seals for 10.4-inch display (10pcs)
IPC-CV12	Protective seals for 12.1-inch display (10pcs)
IPC-CV15	Protective seals for 15-inch display (10pcs)
Cables	
IPC-CBL3-2	Touch panel COM cable (2m)
IPC-CBL3-2	Touch panel COM cable (5m)

Name	Description
Driver	
IPC-SLIB-01	Driver & Utility software (CD-ROM)
Others	
IPC-DT/20-HME	English manual of IPC-DT 20 series
IPC-SND-03	Desk stand
IPC-POA200/12-01	+12VDC output AC power supply unit
IPC-ACAP12-01	+12VDC output AC adapter

Flat Panel Displays

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- Analog I/O
- Digital I/O
- Counters & Motor Controls
- Communication
- GPIO
- Remote I/O
- Bus Expansion System
- Software
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- Distributed Monitor & Control Network: F&EIT
- Multi-Programmable Display
- Remote Monitoring Solution
- Service & Products

IPC-DT 40 Series

Panel Link Embedded Flat Panel Display

IPC-DT/H40X(PC)T
TFT 15" XGA (1024 × 768)



IPC-DT/L40S(PC)T
TFT 12.1" SVGA (800 × 600)

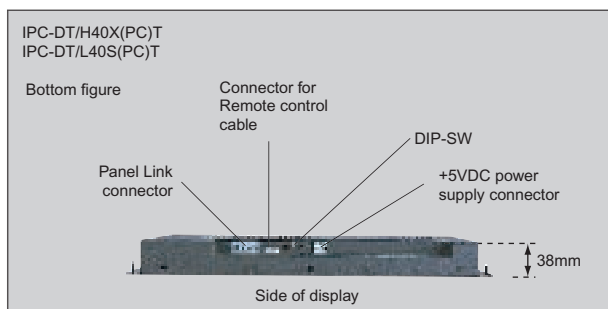


Manual and touch-panel drivers are available on CD-ROM or you can download them for free from our Web site.

Features

- Panel Link interface allows a cable of up to 5m in length to be used
- The quick-response analog touch panel eliminates the need for a keyboard
- External +5VDC power supply / Low-profile structure
- IP65-compliant dustproof/waterproof front panel

Interfaces



IPC-DT/H40X(PC)T



IPC-DT/L40S(PC)T

For Dimensions see Page C-08

Optional Panel Link cable IPC-PL2020-050 (5m)



SPECIFICATIONS

Model	IPC-DT/H40X(PC)T	IPC-DT/L40S(PC)T
Enclosure	Fully enclosed for panel mounting	
Screen size	15"	12"
Resolution	1024 × 768	800 × 600
Display type	TFT Color LCD	
Number of Colors	262,144	
Brightness Control	Adjustment via software control or external switch	
Backlight control	On or off via software control or external switch	
Cable length	2m or 5m (An optional special cable for display is recommended)	
LCD I/F	20-pin MDR connector (Panel Link compliant) (Conversion Box [IPC-CNV/P] is needed when using IPC series products of CONTEC.)	
Power supply I/F	4-pin nylon connector for +5VDC power supply (AC100~240VAC can be inputted when using the optional power supply [IPC-POA100D] for back attachment)	
Touch panel		
Resolution	4,096 × 4,096 (emulated in 1024 × 768)	4,096 × 4,096 (emulated in 800 × 600)
Detection method	Analog resistive	
Touch life expectancy	One million repeated touches (silicon rubber load of 3 N)	
Touch panel interface	20-pin MDR connector on the back (shared with display signals)	
Power Consumption (Max.)	5VDC 4.0A	5VDC 3.0A
Operating temp. / Storage temp. / Humidity	0~50°C / -10~60°C / 10~90%RH (no condensation)	
Floating Dust Particles / Corrosive Gases	Not be excessive / None	
Front panel protection	IP65 compliant	
Dimensions (mm)	428(W) × 336(H) × 38(D)	370(W) × 307(H) × 38(D)
Weight	5.0kg	4.0kg

Options

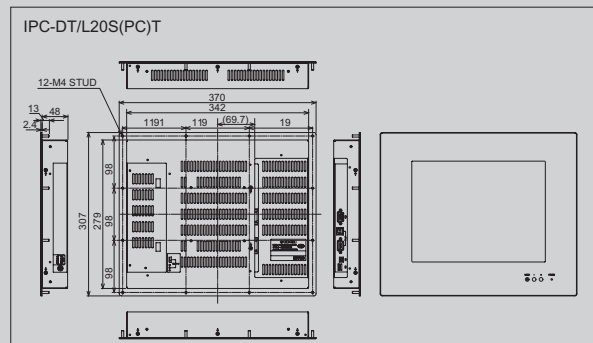
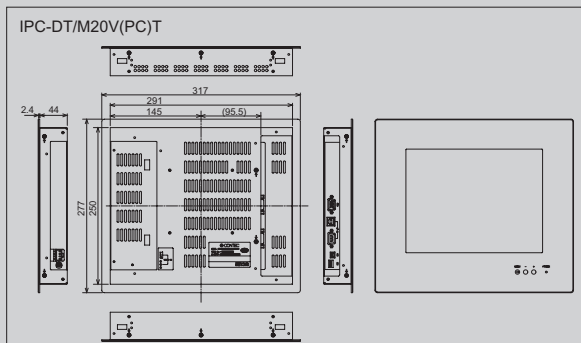
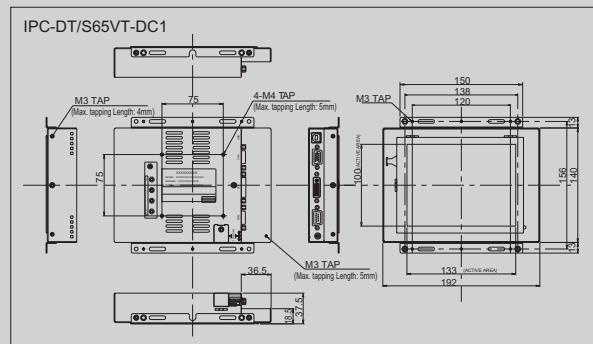
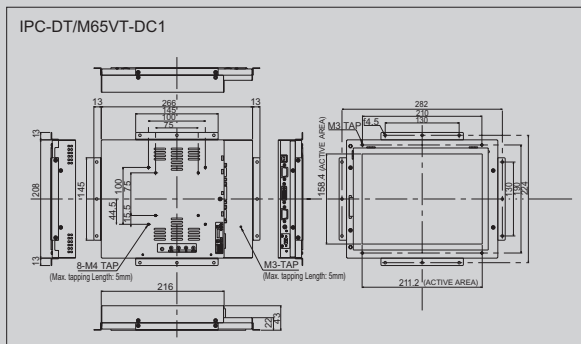
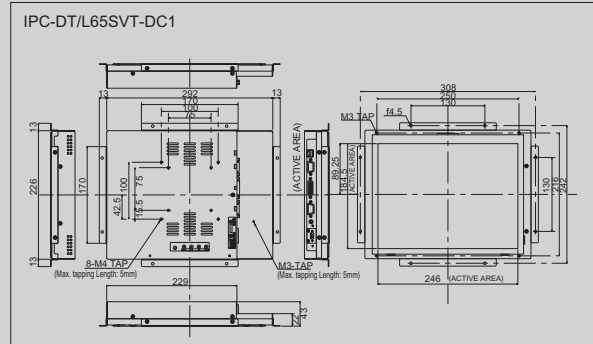
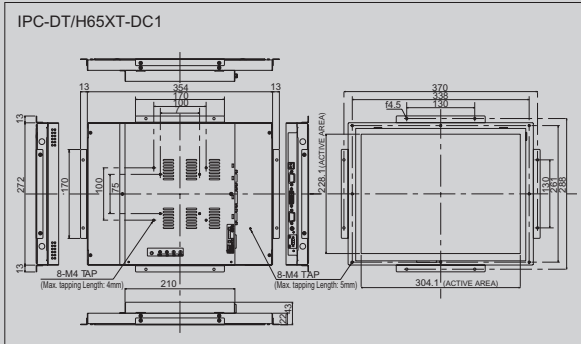
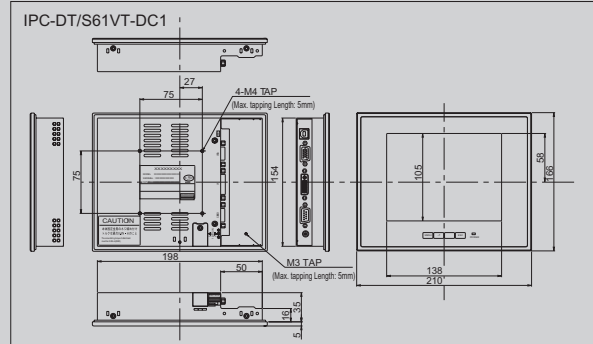
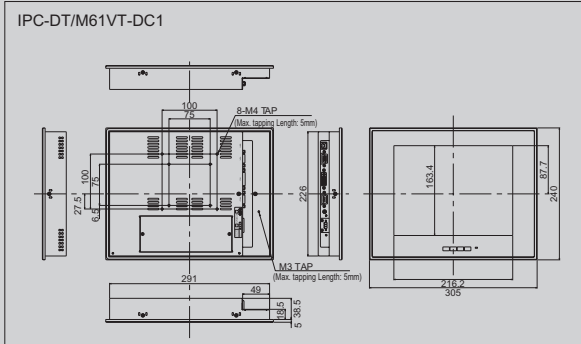
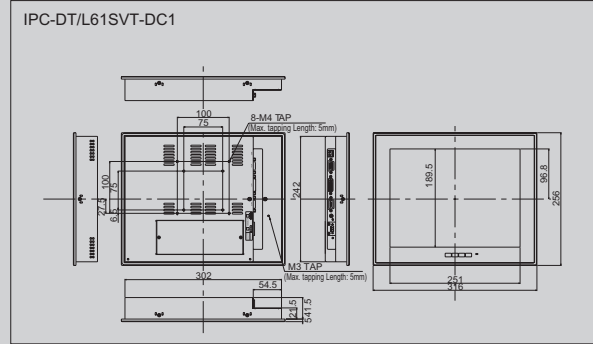
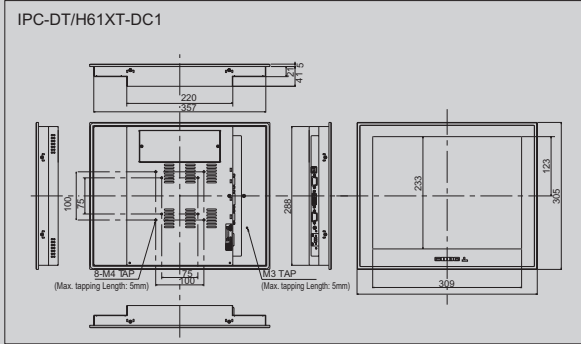
Name	Description
Power Supply unit	
IPC-POA100D	100V~240VAC input power supply unit
IPC-POD24/5	24VDC input power supply unit
Cable	
IPC-DVI/D-020	Panel Link cable (2m)
IPC-DVI/D-050	Panel Link cable (5m)
IPC-DVIPL-020	DVI-D to Panel Link conversion cable (2m)
IPC-DVIPL-050	DVI-D to Panel Link conversion cable (5m)

Name	Description
Manual	
IPC-DT/x40x-HME	English manual of IPC-DT 40 series
LCD Signal Conversion board	
ADPLNK(PC)H	Panel Link interface board for SBC (ISA bus)
Screen Protective Seal	
IPC-CV12	Protective seals for 12.1-inch display (10pcs)
IPC-CV15	Protective seals for 15-inch display (10pcs)
Driver	
IPC-SLIB-01	Driver & Utility software (CD-ROM)

- IPC-DT 61
- IPC-DT 65
- IPC-DT 20
- IPC-DT 40**
- IPC-DT 440
- IPC-DT 400
- IPC-DT 30

Flat Panel Displays

Dimensions



Unit: (mm)

news box

CONTEC SOLUTION

Company Profile

Box PCs

Panel PCs

Flat Panel Displays

Silicon Disk Drive

Options

Box PCs & Panel PCs with Windows CE

Analog I/O

Digital I/O

Counters & Motor Controls

Communication

GPIOB

Remote I/O

Bus Expansion System

Software

Accessories & Cables

Distributed Monitor & Control Network: F&EIT

Multi-Programmable Display

Remote Monitoring Solution

Service & Products

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IPC-DT 61

IPC-DT 65

IPC-DT 20

IPC-DT 40

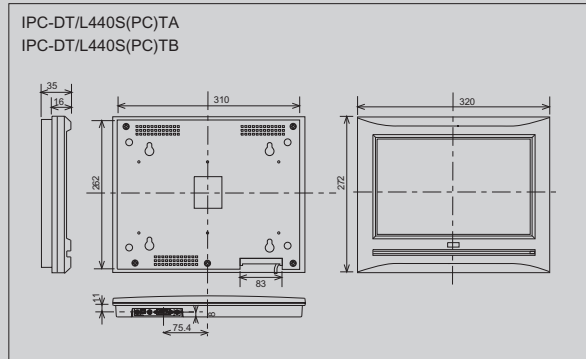
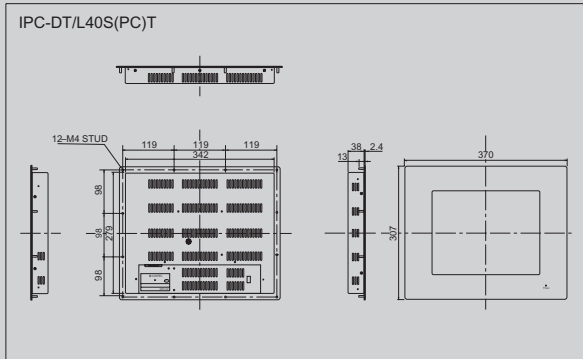
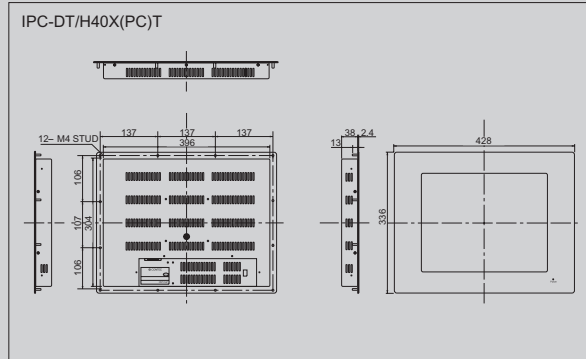
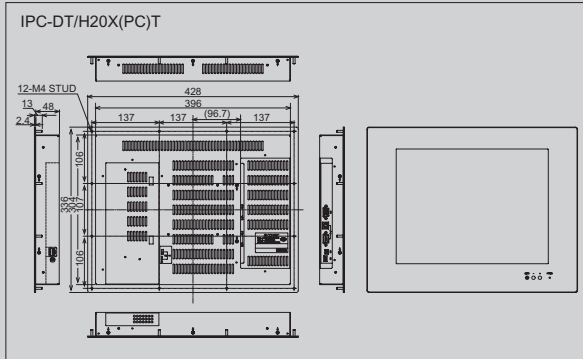
IPC-DT 440

IPC-DT 400

IPC-DT 30

Flat Panel Displays

Dimensions



news box

CONTEC SOLUTION

Company Profile

Box PCs

Panel PCs

Flat Panel Displays

Silicon Disk Drive

Options

Box PCs & Panel PCs with Windows CE

Analog I/O

Digital I/O

Counters & Motor Controls

Communication

GPIO

Remote I/O

Bus Expansion System

Software

Accessories & Cables

Distributed Monitor & Control Network: F&I/T

Multi-Programmable Display

Remote Monitoring Solution

Service & Products

C-08

IPC-DT 61

IPC-DT 65

IPC-DT 20

IPC-DT 40

IPC-DT 440

IPC-DT 400

IPC-DT 30

Unit: (mm)