



multitouch = capacitive = durable





TOUCHPANEL - Made by HUMMEL







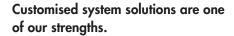




Our Touchsystems are aimed at industrial users, who can choose from a wide range of top-quality products and services.

The product portfolio includes standard systems right up to high-end solutions:

- PCT Touchpanels from 5" to 22" as built-in version or assembled in a housing ready to use. Optional with integrated industrial PC.
- Coverglass with printed frame.
- Optional "Optical bonding".
- Displays
- System solutions

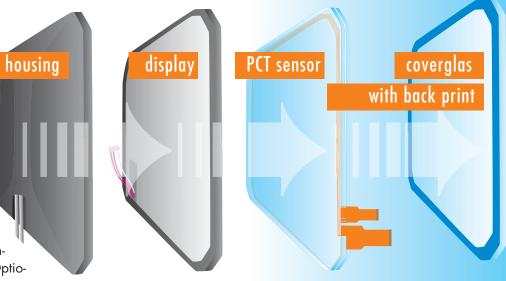


HUMMEL boasts a high degree of vertical integration in this area, as it is also the case in its Electro Technology and Electronic business divisions. All products are developed and manufactured in-house.

Typical applications in the industrial area include industrial automation, process control and visualization. HUMMEL Touchsystems can also be used in the food & beverages, pharmaceutical and chemical sectors. These branches of industry in particular have special requirements in terms of sustainability, hygiene and cleanliness.

Multitouch - robust - hygienic - brilliance

Multitouch Touchpanels with seamless glass fronts feature a scratch-resistant and impact-proof user interface. The optically bonded glass fronts (available on request) together with LED backlight displays ensure a brilliance that has never been achieved before.



In addition, the built-in PCT technology provides an option to construct Touchpanels such as that they can be operated with any type of gloves and controlled by means of gestures. An impact resistance of IK 08 can be achieved even in glass with minimum thickness without impacting on the ease of use.

The tried and tested HUMMEL Circular Connectors achieve a protection class of IP 67 / IP 69K, which means that the Touchpanels are also suitable for high-pressure cleaning. UL and EX certification are available as well.

The housings are fitted with the VESA 100 system and can be supplied with adjustable monitor arm or a pedestal.

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MULTITOUCH Built in-Panel



Protection	front IP 65 / rear IP 20
Touch	projected capacitive touch (PCT)
	multitouch, operable with gloves
	optional: brilliance version
Temperature range	operating: 0 ° C +60 ° C storage -20 ° C + 70 ° C
Attachment	front mounting
Advice:	

- steel plate housing
 glass front with aluminium frame
 without cable set and power supply, Accessories on page 8

Customised solutions on request!



Version	Size	Ratio	Resolution	Dimensions in mm	Frame Dimension in mm	Part Number
Standard	8,4"	4:3	800 x 600	277 x 233 x 67	287 x 243 x 5	6.084.2000.0
Brilliance	8,4"	4:3	800 x 600	277 x 233 x 67	287 x 243 x 5	6.084.2001.01
with IPC	8,4"	4:3	800 x 600	277 x 233 x 67	287 x 243 x 5	6.084.2010.01
Brilliance / with IPC	8,4"	4:3	800 x 600	277 x 233 x 67	287 x 243 x 5	6.084.2011.0
Standard	10,4"	4:3	800 x 600	306 x 254 x 68	316 x 264 x 5	6.104.2000.01
Brilliance	10,4"	4:3	800 x 600	306 x 254 x 68	$316 \times 264 \times 5$	6.104.2001.0
with IPC	10,4"	4:3	800 x 600	306 x 254 x 68	316 x 264 x 5	6.104.2010.0
Brilliance / with IPC	10,4"	4:3	800 x 600	306 x 254 x 68	316 x 264 x 5	6.104.2011.0
Standard	12,1"	4:3	1024 x 768	330 x 270 x 68	340 x 280 x 5	6.121.2000.0
Brilliance	12,1"	4:3	1024 x 768	330 x 270 x 68	340 x 280 x 5	6.121.2001.0
with IPC	12,1"	4:3	1024 x 768	330 x 270 x 68	340 x 280 x 5	6.121.2010.0
Brilliance / with IPC	12,1"	4:3	1024 x 768	330 x 270 x 68	340 x 280 x 5	6.121.2011.0
Standard	15"	4:3	1024 x 768	397 x 321 x 73	407 x 331 x 5	6.150.2000.0
Brilliance	15"	4:3	1024 x 768	397 x 321 x 73	407 x 331 x 5	6.150.2001.0
with IPC	15"	4:3	1024 x 768	397 x 321 x 73	407 x 331 x 5	6.150.2010.0
Brilliance / with IPC	15"	4:3	1024 x 768	397 x 321 x 73	407 x 331 x 5	6.150.2011.0
Standard	17"	5:4	1280 x 1024	439 x 371 x 75	449 x 381 x 5	6.170.2000.0
Brilliance	17"	5:4	1280 x 1024	439 x 371 x 75	449 x 381 x 5	6.170.2001.0
with IPC	17"	5:4	1280 x 1024	439 x 371 x 75	449 x 381 x 5	6.170.2010.0
Brilliance / with IPC	17"	5:4	1280 x 1024	439 x 371 x 75	449 x 381 x 5	6.170.2011.0
Standard	19"	16:10	1440 x 900	511 x 358 x 68	521 x 368 x 5	6.190.2000.0
Brilliance	19"	16:10	1440 x 900	511 x 358 x 68	521 x 368 x 5	6.190.2001.0
with IPC	19"	16:10	1440 x 900	511 x 358 x 68	521 x 368 x 5	6.190.2010.0
Brilliance / with IPC	19"	16:10	1440 x 900	511 x 358 x 68	521 x 368 x 5	6.190.2011.0
Standard Standard	22"	16:10	1680 x 1050	580 x 402 x 70	590 x 412 x 5	6.220.2000.0
Brilliance	22"	16:10	1680 x 1050	580 x 402 x 70	590 x 412 x 5	6.220.2001.0
with IPC	22"	16:10	1680 x 1050	580 x 402 x 70	590 x 412 x 5	6.220.2010.0
Brilliance / with IPC	22"	16:10	1680 x 1050	580 x 402 x 70	590 x 412 x 5	6.220.2011.0



MULTITOUCH Standard-Panel

IP 20 Protection Touch projected capacitive touch (PCT) multitouch, operable with gloves optional: brilliance version operating: 0°C... +60°C storage -20°C...+ 70°C Temperature range Attachment VESA 100 system Advice:

- steel plate housing, powder-coated black glass front with aluminium frame without cable set and power supply, Accessories on page 8

Customised solutions on request!





Version	Size	Ratio	Resolution	Dimensions in mm	Part Number
Standard	12,1"	4:3	1024 x 768	330 x 270 x 65	6.121.1000.01
Brilliance	12,1"	4:3	1024 x 768	330 x 270 x 65	6.121.1001.01
with IPC	12,1"	4:3	1024 x 768	330 x 270 x 65	6.121.1010.01
Brilliance / with IPC	12,1"	4:3	1024 x 768	330 x 270 x 65	6.121.1011.01
Standard	15"	4:3	1024 x 768	397 x 321 x 69	6.150.1000.01
Brilliance	15"	4:3	1024 x 768	397 x 321 x 69	6.150.1001.01
with IPC	15"	4:3	1024 x 768	397 x 321 x 69	6.150.1010.01
Brilliance / with IPC	15"	4:3	1024 x 768	397 x 321 x 69	6.150.1011.01
Standard	1 <i>7"</i>	5:4	1280 x 1024	439 x 371 x 75	6.170.1000.02
Brilliance	1 <i>7"</i>	5:4	1280 x 1024	439 x 371 x 75	6.170.1001.02
with IPC	1 <i>7"</i>	5:4	1280 x 1024	439 x 371 x 75	6.170.1010.02
Brilliance / with IPC	17"	5:4	1280 x 1024	439 x 371 x 75	6.170.1011.02
Standard	19"	16:10	1440 × 900	511 × 358 × 68	6.190.1000.04
Brilliance	19"	16:10	1440 x 900	511 x 358 x 68	6.190.1001.04
with IPC	19"	16:10	1440 x 900	511 x 358 x 68	6.190.1010.04
Brilliance / with IPC	19"	16:10	1440 x 900	511 x 358 x 68	6.190.1010.04
brilliance / willi IFC	17	10.10	1440 X 900	311 x 336 x 06	0.170.1011.04
Standard	22"	16:10	1680 x 1050	580 x 402 x 70	6.220.1000.04
Brilliance	22"	16:10	1680 x 1050	580 x 402 x 70	6.220.1001.04
with IPC	22"	16:10	1680 x 1050	580 x 402 x 70	6.220.1010.04
Brilliance / with IPC	22"	16:10	1680 x 1050	580 x 402 x 70	6.220.1011.04





MULTITOUCH Design-Panel



IP 65 / IP 69 K Protection Touch projected capacitive touch (PCT)

multitouch, operable with gloves

brilliance version

operating: 0°C... +60°C storage -20°C...+ 70°C Temperature range

Attachment VESA 100 system

Advice:

- aluminium housing, powder-coated black glass front with black printed frame and white "HUMMEL" logo with cable set and power supply

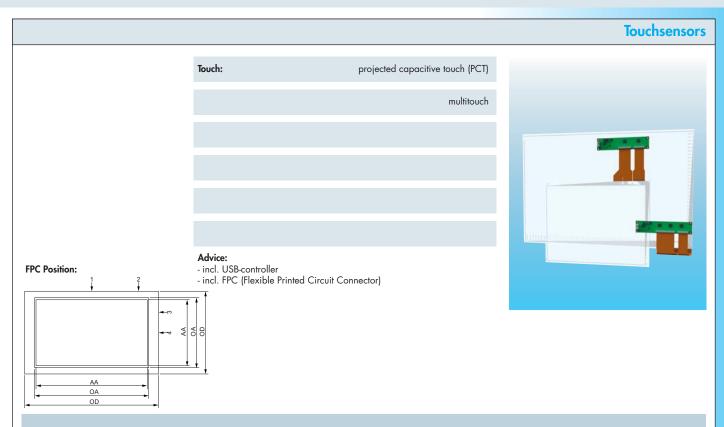






Version	Size	Ratio	Resolution	Dimensions in mm	Part Number
Brilliance	19"	16:10	1440 x 900	480 x 335 x 50	6.190.5001.04
Brilliance / with IPC	19"	16:10	1440 x 900	480 x 335 x 50	6.190.5011.04
Brilliance	22"	16:10	1680 x 1050	565 x 370 x 50	6.220.5001.04
Brilliance / with IPC	22"	16:10	1680 x 1050	565 x 370 x 50	6.220.5011.04





Size	Ratio	Active Area in mm	Open Area in mm	Outside Dimensions in mm	FPC Position	Part Number
5,7"	4:3	115,3 x 86,5	117,3 x 88,5	133,46 x 101,95	3	6.057.3000.31
6,5"	4:3	133,6 x 100,2	135,6 x 102,0	152,20 x 117,30	3	6.066.3000.31
7"	16:10	152,1 x 93,6	153,2 x 94,5	168,52 x 107,37	3	6.070.3000.34
8"	5:3	173,4 x 104,0	177,4 x 107,0	190,85 x 119,29	3	6.080.3000.35
8,4"	4:3	174,8 x 133,7	175,0 x 133,9	192,60 x 149,04	2	6.087.3000.21
9"	16:9	195,0 x 117,0	196,0 x 118,0	218,92 x 138,00	3	6.090.3000.36
10,1"	16:9	220,4 x 129,2	223,4 x 132,2	248,92 x 151,45	4	6.101.3000.46
10,4"	4:3	211,2 x 158,4	214,5 x 162,4	231,65 x 184,89	2	6.104.3000.21
12,1"	16:10	261,1 x 163,2	263,1 x 165,2	284,52 x 193,10	2	6.121.3000.24
12,2"	4:3	248,0 x 186,5	249,5 x 188,0	265,50 x 208,00	2	6.122.3000.21
15"	4:3	304,1 x 228,1	307,6 x 231,6	329,25 x 256,40	2	6.150.3000.21
15,4"	16:10	331,3 x 207,0	334,3 x 210,0	352,20 x 234,30	2	6.154.3000.24
15,6"	16:9	344,2 x 193,5	346,2 x 197,0	369,00 x 234,38	1	6.155.3000.16
1 <i>7</i> "	5:4	339,0 x 271,2	341,0 x 273,2	372,30 x 302,80	2	6.171.3000.22
18,5"	16:9	413,4 x 234,0	413,6 x 234,2	437,50 x 266,90	2	6.187.3000.26
19"	5:4	376,0 x 304,0	377,2 x 305,2	398,03 x 329,18	2	6.190.3000.22
19"	16:10	410,0 x 256,0	412,0 x 258,0	429,69 x 283,20	2	6.190.3000.24
21,6"	16:9	478,6 x 271,2	480,1 x 272,7	500,00 x 303,32	2	6.217.3000.26
22"	16:10	473,8 x 296,1	479,7 x 302,1	500,00 x 336,07	2	6.220.3000.24

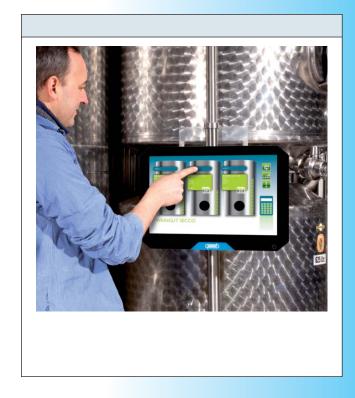




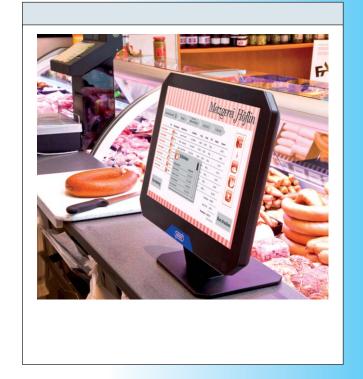
Accessories	Туре	Part Number
	Dataflex adjustable monitor arm with VESA 100 system	6.000.0002.00
	Power Supply 230 V	6.000.0003.00
	VESA 100 System adapter plate for Multitouch Standard-Panel	6.000.0007.00
	Operating System	on request















HUMMEL AG















10 www.hummel.c



As a medium-sized enterprise with an international outlook HUMMEL AG has a world-wide reputation as a manufacturer of touch systems, electro-mechanical installation systems, electronics for medical and MSR technology and fittings for the heating industry.

HUMMEL provides all: development, construction, tool-making, manufacturing, electroplating and assembly all under one roof, thus guaranteeing concentrated expertise and efficient processes. Being able to supply everything from one source means that HUMMEL can offer its customers from industry and technology the fast and flexible system solutions they need and a broad range of high-quality products. The HUMMEL product range includes:

- touch sensors, touch panels and touch systems
- circular connectors, enclosure systems, cable glands, cable protection systems, including for outdoor applications
- temperature regulators, operating panels, battery-charging technology, sensors, controls
- system solutions, front panels, enclosure machining, cable manufacture
- customized metal and plastic parts
- fittings for heating systems
- measurement devices for usage in ophthalmology

HUMMEL has been expanding its operation for a number of years and attributes its market success to the fact that it has consistently lived up to its "setting standards" motto across all areas of its operation. Evidence of this includes the company's many patents, its constant new developments and refinements, its high vertical integration, the flexibility of its special applications, high manufacturing quality and, of course, its long tradition of having an international focus.

In all its activities, the company maintains a clear commitment to its site in Germany which is why it has invested to a great extend at its headquarters in Denzlingen and, with an eye to the future, has recently spent over 15 million euros on new, modern buildings and production facilities. As well as its international headquarters in Denzlingen and its historical base in Waldkirch, HUMMEL also has a number of subsidiaries and sales offices in many parts of the world.









11

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Operator Panels – Frontsheets and Keyboards – Battery Chargers Cable Assembly – Sensors – Controls – Systems Solutions – Temperature Controllers



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Customised

Parts made of Metal and Nylon



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