

## Special offer

### Manual Coordinate Measuring Machine SMART

**Granite guide ways** of highest quality secures high thermal stability, precision and mechanical rigidity.

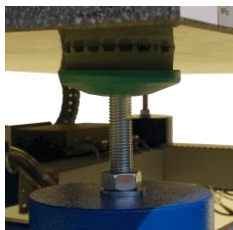
**Optimized air bearings** are used to realize highest precision and lowest air consumption.

The **single lock for each axis** enables the operator to lock an axis and to perform pre-cise measurements within a plane.

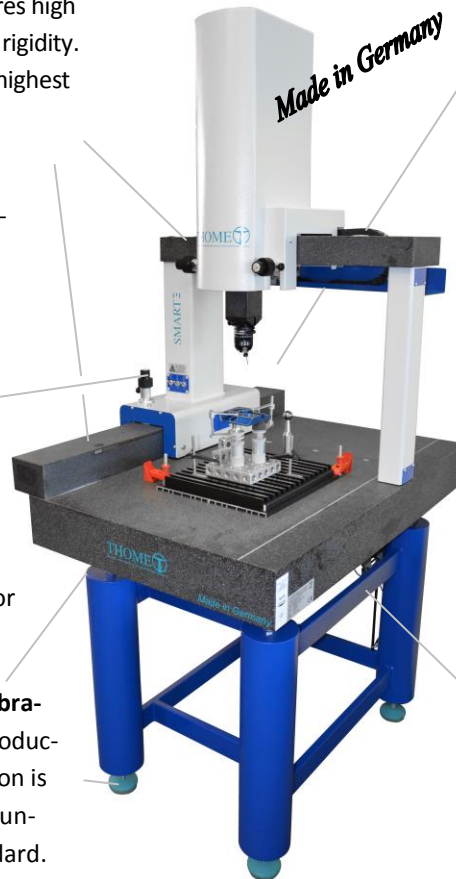


A **two-stage fine drive** in all axes

This allows fast and very precise motions, for the measurement of tight contours.



A **double-passive vibration damping** for production applied operation is integrated into the underframe as a standard.



#### Probes by RENISHAW

##### a) TP8

Manual rotatable probe head for simple measurement tasks. Must be recalibrated after turning and rotating.



##### b.) MH20i

manual, indexable and rotatable probe head, 168 repeatable positions in 15° increments, TP20 probe integrated, all positions can be reproduced without recalibration. Fast change of the tip by hand because of magnetic holder.



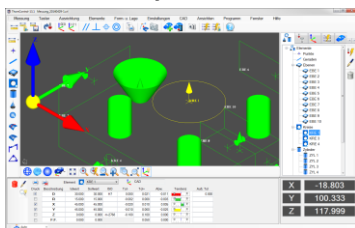
**Taststift M2, Ø3, L=30, Stahl**



**Pressure gauges** in each axis for easy maintenance reason.

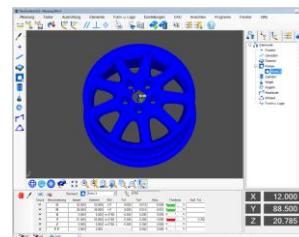


#### User-friendly measurement software



##### a.) Basic geometry

All geometric elements can be measured, graphically displayed and recorded. Evaluation of all shape and position tolerances. ISO tolerance database is integrated. Measuring programs via Teach-In.



##### b.) Basic geometry with CAD

CAD files in IGS and STEP format can be imported. Elements can be selected by clicking on the CAD model to create the nominal data.

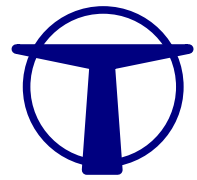
#### Your delivery:

1. CMM SMART Manual "Made in Germany" - Uncertainty acc. ISO 10360-2 MPE<sub>E</sub>=3+L/250, MPE<sub>P</sub>=3,5µm
2. USB Counting Box
3. DELL PC-to-date performance, including 3-year on-site service, WINDOWS 7, 22"-LED Monitor, "ALL IN ONE" colour printer.
4. Stylus Ø3 L=30 steel and calibration ball Ø25.

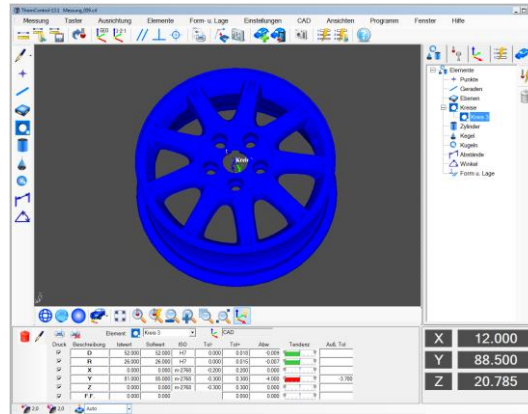
You will also receive the following equipment according to your requirements:

	SMART package 1	SMART package 2	Best seller!	SMART package 4
Probe	TP8	TP8	MH20i	MH20i
Inspection software ThomControl	Basic geometry	Basic geometry CAD	Basic geometry	Basic geometry CAD
Measuring range 600x400x300mm	13.990 €	15.990 €	16.490 €	17.990 €
Order No.:	P643-G-TP8-UK	P643-C-TP8-UK	P643-G-MH20i-UK	P643-C-MH20i-UK
Measuring range 800x400x300mm	14.990 €	16.990 €	17.490 €	18.990 €
Order No.:	P843-G-TP8-UK	P843-C-TP8-UK	P843-G-MH20i-UK	P843-C-MH20i-UK

All prices are Ex. Work. Transport, packing, training, installation and travel expenses are not included. Warranty period: 12 months. This offer is without obligation and valid until 31.12.2017.



## 3D-Measuring Machine „SMART“ manual with user-friendly inspection software ThomControl

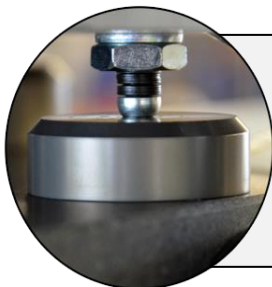


THOME PRÄZISION		Bericht Nr.: 123456		Bearbeitung: Motor	
		Zeichen Nr.: 123		Serien Nr.: 001	
		Prüfer: M. Thome		Drehrichtung: Ersterer	
<b>Ergebnisse</b>					
Geometrische Punkte: Bestätigter Kommentar					
PUNKT					
Merkmale	Intervall	Software	Tol.	Tol. +	Abw. Tendenz
KRE 1 Kreis					
Merkmale	Intervall	Software	Tol.	Tol. +	Abw. Tendenz
SD	0.001	0.001	0.001	0.001	0.001
Y	22.000	22.000	-0.200	0.200	0.000
Z	17.000	17.000	-0.200	0.200	0.000
KRE 4 Kreis					
Merkmale	Intervall	Software	Tol.	Tol. +	Abw. Tendenz
SD	0.001	0.001	0.001	0.001	0.001
Y	22.000	22.000	-0.200	0.200	0.000
Z	17.000	17.000	-0.200	0.200	0.000
Langloch1 Kreis					
Merkmale	Intervall	Software	Tol.	Tol. +	Abw. Tendenz
SD	0.001	0.001	0.001	0.001	0.001
Y	22.000	22.000	-0.200	0.200	0.000
Z	17.000	17.000	-0.200	0.200	0.000
Langloch2 Kreis					
Merkmale	Intervall	Software	Tol.	Tol. +	Abw. Tendenz
SD	0.001	0.001	0.001	0.001	0.001
Y	22.000	22.000	-0.200	0.200	0.000
Z	17.000	17.000	-0.200	0.200	0.000
Passung3H01 Kreis					
Merkmale	Intervall	Software	Tol.	Tol. +	Abw. Tendenz
SD	0.001	0.001	0.001	0.001	0.001
Y	22.000	22.000	-0.200	0.200	0.000
Z	17.000	17.000	-0.200	0.200	0.000
Passung3H02 Kreis					
Merkmale	Intervall	Software	Tol.	Tol. +	Abw. Tendenz
SD	0.001	0.001	0.001	0.001	0.001
Y	22.000	22.000	-0.200	0.200	0.000
Z	17.000	17.000	-0.200	0.200	0.000
Passung3H03 Kreis					
Merkmale	Intervall	Software	Tol.	Tol. +	Abw. Tendenz
SD	0.001	0.001	0.001	0.001	0.001
Y	22.000	22.000	-0.200	0.200	0.000
Z	17.000	17.000	-0.200	0.200	0.000

Our manual measuring machine SMART convinced by a simple operation, high accuracy and robustness. A two speed adjusting drive is integrated in all axis. Thus, the axes of the measuring machine can move very fine or very quickly. Through the fine adjustment the positioning can be done very accurate. The three axes can be clamped individually by clearly arranged switches. So the operator can move the machine parallel along each axis.

The guides of the measuring machine are executed on all axes made of high quality granite in combination with precision air bearings. In the base a double passive vibration damping is integrated. This vibrations up to 30 Hz can be attenuated. Installation in the production environment is therefore possible. Wherein vibrations below 30 Hz active vibration dumpers also can be integrated in the subframe in order to ensure an even better vibration damping.

### Your Advantages:



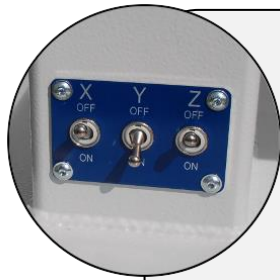
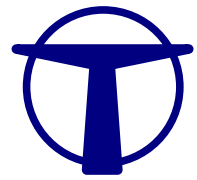
#### High-quality air bearings

Fine lapped on a planeness of 0.0005 mm, resulting in maximum reproducibility of the measurement results. The air bearing technology enables frictionless bearings of guides. The machines thus operate nearly maintenance free.



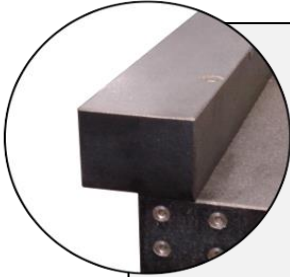
#### Two-speed adjusting drive

The two speed adjusting drive allows a very quickly and accurate measuring as well as a very fine positioning. Especially in fine contours they have the opportunity to touch very slowly and to position very accurately. With the two speed adjusting drive can be measured easy even in small holes.



## Single clamping of each axis

The single clamping of each axis allows the operator the clamping of one single axis. As a result the machine moves exactly parallel to X, Y and/or Z axis. Through the single clamping of each axis the workpiece can be aligned along the machine axes very precise.



## Granite guides

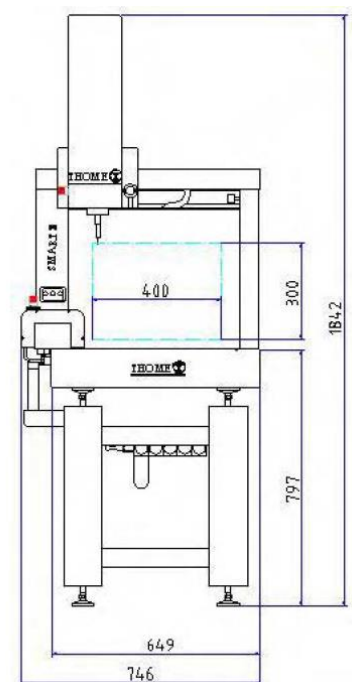
All guides are made from fine granite and are grinded and lapped to its highest precision. The precision of the guides is up to 0,001mm/m. The thermal stability and high precision of the guides ensure accurate measurement results and excellent reproducibility.



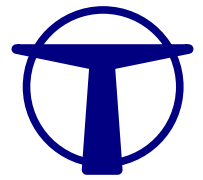
## Gold plated high precision scales from Renishaw

Digital, high resolution scales with a standard resolution of 0,0005 mm (alternatively 0,0001 mm). Robust and maintenance free with an excellent filter optics. The scales work with incident light.

	SMART	
Measuring Area (mm)		
X-Axis	600	800
Y-Axis	400	400
Z-Axis	300	300
Table Height (mm) (A)	850	
Dimension (mm)		
Length (L)	1.013	1.213
Width (B)	760	760
Height (H)	1.842	1.842
Measurement accuracy	According to ISO 10360-2	
MPE <sub>e</sub> *	3+(L/250)µm	
MPE <sub>p</sub> **	3,5 µm	
Resolution (mm)	0,0005	
Weight (kg)	410	500
Permitted weight of workpiece (kg)	200	250
Temperature for guaranteed Accuracy	20°C +/-2°C max 1°C per hour max 1,5°C per day	
Air consumption (L/min)	25	
Air quality:	pre-cleaned according to ISO 8573 class 2	







## ThomControl

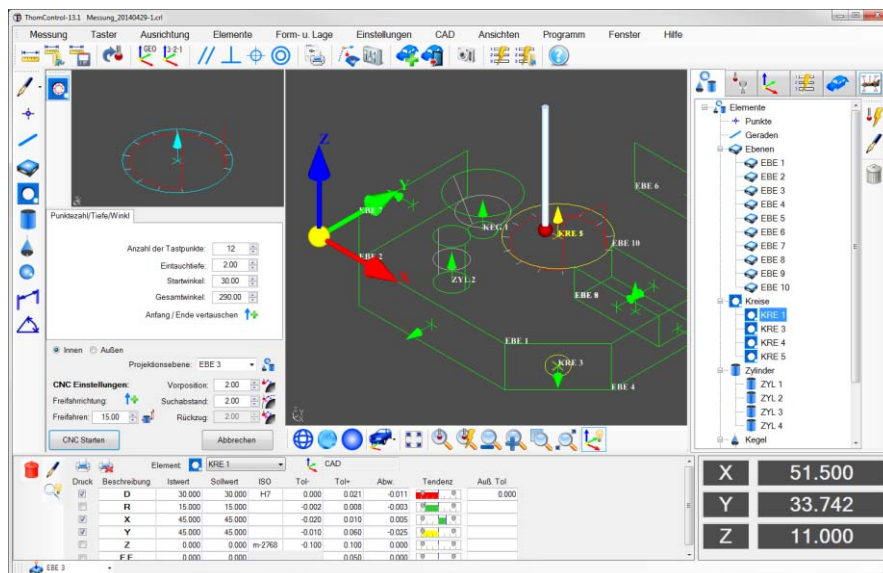
### User-friendly inspection software

The inspection software **ThomControl** is **very easy to use**.

An **extensive graphical support** allows even inexperienced operators after a few days the efficient and time saving inspection. **Teach-In** measurement programs can be learned by using the joystick. If the operator works with a CAD model, the **features can be selected via the CAD file with a mouse click and automatically measured**. The measurement program is generated automatically in the background. For all items **CNC probing strategies** are available, which are displayed visually and **can be configured as required**.

**ThomControl** based on the **I++ DME communication standard** and can be used with all the hardware components that support this interface. Therefore **modernization (RETROFIT)** of old **CMM's** from any manufacturer is cost effective possible.

### ThomControl Basic geometry

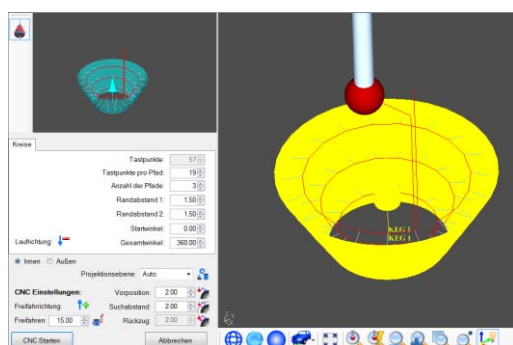


**Simple, intuitive operation** with graphical support through a **clear user interface**.

**Easily create alignments** with the **3-2-1-alignment** or the **Geometric alignment** respectively with **graphic preview**.


The **nominal values** of the elements can be **entered in clear windows** and then be **automatically measured via a displayed CNC measuring strategy**. A **tolerance database** with the ISO tolerances according to DIN ISO 286 is available. The **measurement results** are displayed directly in the result window **with graphical trend bars**.

**Comprehensive form and position evaluations** such as parallelism, per-



pendicularity, concentricity, position, flatness, straightness, etc. are available.

**Measuring programs** can be **easily created** and **very easily changed by double clicking on the program line**. Both **CNC and manual measurement programs** can be generated.



Bericht Nr.: 123456

Zeichn. Nr.: 789

Prüfer: M. Thome

Benennung: Muster

Serien Nr.: 001

Bemerkung: Erstmuster

Ergebnisse

Geometrischer Punkt: Beliebiger Kommentar

PUNKT 6

Markmal	Istwert	Softwert	Tol -	Tol +	Abw.	Tendenz
Z	-147.104	-147.000	-0.500	0.500	-0.104	<div><div></div></div>

KREIS 1

Kreis

Markmal	Istwert	Softwert	Tol -	Tol +	Abw.	Tendenz
DRH	6.046	6.000	0.010	0.058	0.012	<div><div></div></div>
Y	22.000	22.000	-0.200	0.200	0.000	<div><div></div></div>
Z	-37.000	-37.000	-0.300	0.300	0.000	<div><div></div></div>

KREIS 4

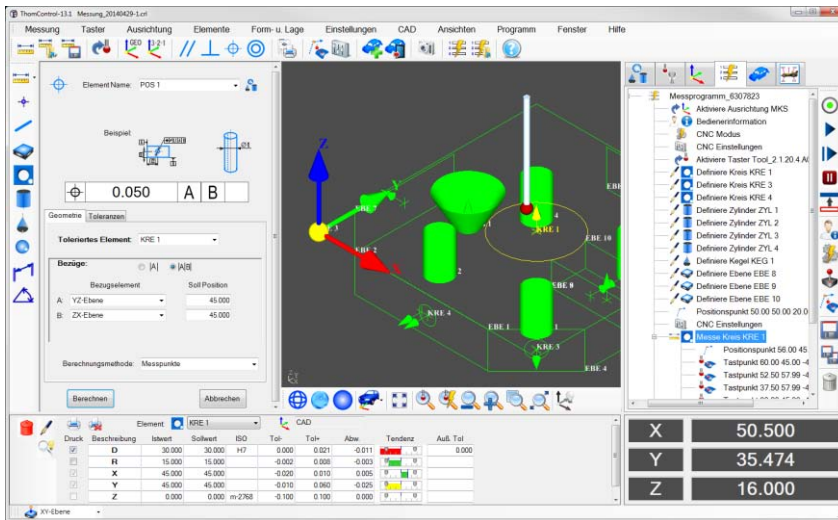
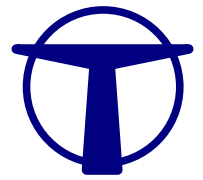
Kreis

Markmal	Istwert	Softwert	Tol -	Tol +	Abw.	Tendenz
DRH	18.351	18.000	-0.500	0.500	0.351	<div><div></div></div>
Y	-38.382	-38.000	-0.350	0.350	-0.382	<div><div></div></div>
Z	-15.965	-15.786	-0.200	0.200	-0.179	<div><div></div></div>

Langloch

Kreis

Markmal	Istwert	Softwert	Tol -	Tol +	Abw.	Tendenz
DRH	6.079	6.100	-0.050	0.050	-0.021	<div><div></div></div>
Y	-19.063	-19.000	-0.200	0.200	-0.063	<div><div></div></div>
Z	-37.008	-37.000	-0.300	0.300	-0.008	<div><div></div></div>

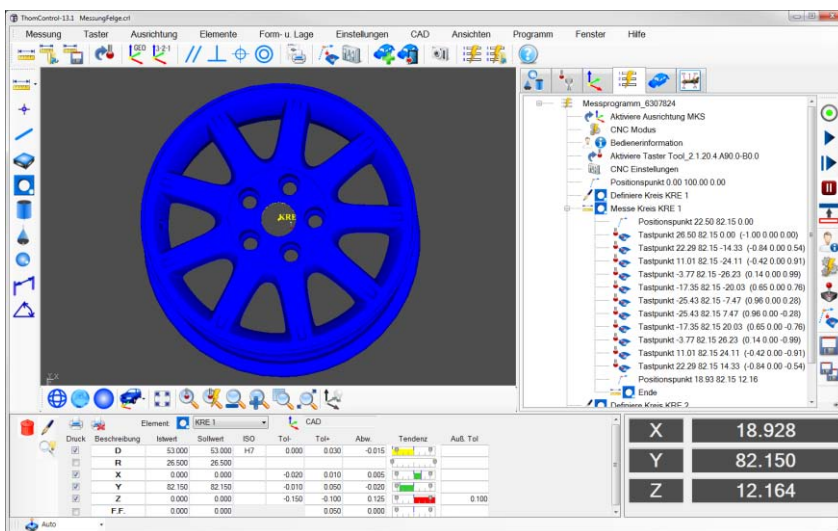


All measurement results are stored and are available again at any time. In addition to the internal file format of THOMControl the measurement reports can also be saved in **Word, Excel and PDF**. The measurement reports are easy to adapt to your layout requirements. Several standard report templates are included.

Various constructions of geometric elements allow extensive calculations of theoretical dimensions.

All items are displayed graphically in 3D and can be printed graphically, for better interpretation of the measurement results.

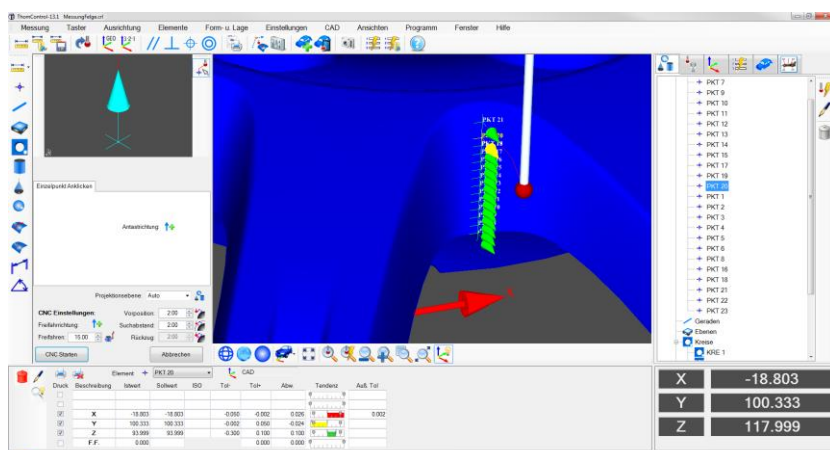
## ThomControl Basic geometry with CAD



CAD files in IGS and STEP format can be imported. Elements can be selected via the CAD file with a mouse click and automatically measured. The software proposes a measurement strategy and shows the paths graphically. The strategy may be modified as required.

The measuring program is written by simply clicking the CAD elements. **Nominals** are automatically generated and transferred from the CAD data. The optimal vectorial directions of the measuring points is guaranteed. Any number of measurement points can be approached even in difficult areas. **Measuring programs** can also be created **offline** and the measurement process can be **simulated**. **Graphical views** can be created and recalled at any time.

## ThomControl Basic geometry with CAD and freeform surface measurement



The alignment over 6 surface points and the best-fit alignment are available for fast and accurate alignment against a CAD-part.

The measurement of sections can be simply done by clicking start and end point. The point density can be adjusted individually.

Surface shapes can be measured using automatically generated grid of points. Line- and surface shape tolerances are calculated and displayed graphically.

## Manual Probe Heads

### TP8

#### Manual rotateabel probe head from Renishaw with integrated probe

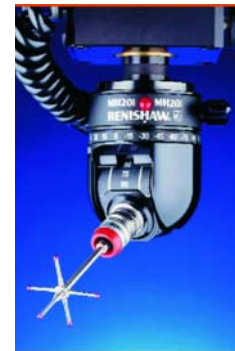
The TP8 is extremely robust and a low cost solution. It is useable on manual measuring machines as well as on CNC machines.

- The TP8 has a fixed integrated probe
- 2D repeatability  $\pm 1\mu\text{m}$ . The stylus force is up to 0,13 N in X-Y-plane
- The fixing of the stylus is by M3 screw
- The TP8 must be recalibrated after each rotation.
- It does not work with an automaticly changing rack.
- Stylus up to 50mm useable (Price 799,-€)



### MH20i

- manual indexing rotating/swivelling head with integrated touch-trigger probe TP20 including a trigger module with connecting thread M2, spanners, cleaning kits and user manuals
- cinematic positioning mechanism enables setting of positions already calibrated without the necessity of recalibration
- individual modules may be changed during measuring without the need of their recalibration
- indexing possibility after  $15^\circ$  increments, position repeatability  $1.5\mu\text{m}$  with module 48mm long (Price 3.243,-€)



MH20i

### MH20

The same as MH20i – but continuously positioned

- axis A  $\pm 93^\circ$ , axis B  $\pm 300^\circ$
- touch position must be recalibrated after turning of the head (Price 2.799,-€)



MH20

### Probe modules:

Application of various probe modules for different uses possibly:

- **SF** – Standard Force - Suited to the majority of applications Stylus up to 50mm useable (Price 895,-€)
- **LF** - Low force – For low trigger forces applications - e.g. rubber seals. Stylus up to 50mm useable (Price 984,-€)
- **MF** - Medium force - Where a higher trigger force than standard is required. Stylus up to 60mm useable (Price 895,-€)
- **EF** - Extended force – For heavy stylus assemblies or where vibration causes spurious air triggers. Stylus up to 60mm useable. (Price 895,-€)
- **6W** - 6-way - Measurement in the -Z direction - e.g. undercuts Stylus up to 30mm useable (Price 1.163,-€)
- **EM1 STD** – Modul extension with 70mm (Price 1.081,-€)
- **EM2 STD** – Modul extensions with 95mm. (Price 1.111,-€)

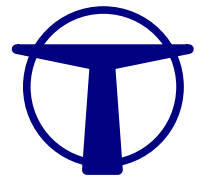


SF/LF/MF/EF/6W Modules



EM1/EM2 Extension





## PC-Systems

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### **Dell LED Monitor 21,5" (54,5cm)**

**Warranty: 3 years replacement service**

In the inclination adjustable 22-inch screen, high picture contrast and quick response times. In the wide picture format you can explain several uses side by side on a screen and increase thus your productiveness

VGA, DVI-D (1920x1080) high resolution



### **Intel Core i5-4570 Quad Core (3.20GHz, 6MB)**

Mini-Tower

**Warranty: 3 years replacement service**

- 500GB Hard Disk
- Working memory 8GB
- 16X Half Height DVD+/-RW Drive
- AMD RadeonHD 8570, 1GB DDR3
- Windows 7 Professionell 64 bit
- Wireless mouse and Wireless keyboard

Installation, configuration, connecting of all cables, installation of additional cards, test and set machine parameters, connecting to the CMM.



### **HP Photosmart 5520 e-All-in-One**

4-in-1 multifunctional device for wireless printing, scanning, copying and faxing with exceptionally low cost per page.

Print speed up to 11 S./Min. in s/w, 8 S./Min. in color, Print quality up to 4.800 x 1.200dpi, Scanning resolution up to 1.200 x 2.400dpi



## **General terms of business of the company THOME Präzision GmbH**

### **1. Offers**

Our offers, also on the part of our representatives, are without obligation. The written order confirmation is obliging. Supplements, changes or verbal additional agreements need to her effectiveness of the written confirmation. The documents belonging to the offer, pictures Drawings, Declarations of weight and Measurements are authoritative only roughly, as far as they are not called expressly obliging. In quotations, drawings and other documents the THOME Präzision GmbH reserves itself property rights and copyrights; they may be made to third not accessible.

### **2. Price and payment**

a. Basically the agreed prices get on not free ex works; cargo, postage, duty, assembly and packaging pays the customer just as a desired transport, theft and pilferage or other insurance. The packaging is calculated to the respective cost of sales. From this divergent arrangements need the written form. For the prices the value added tax comes by the respective legal height.

b. In the absence of special arrangements the payment is to be made cash freely cashier's office of the THOME Präzision GmbH namely:

30% payment in advance after receiving the order confirmation within 14 days, 70 % payment in advance 20 days before the estimated shipping date.

### **3. Delivery time**

a. Delivery dates, achievement terms and appointments are valid only roughly, unless they are agreed in particular cases expressly and in writing as obliging.

B. If terms of delivery are agreed obligingly, they begin with sending the order confirmation, however, not before adduction of the documents to be procured by the customer, approvals, releases as well as before entrance of the agreed deposit.

c. An agreed delivery time is kept if up to her expiry the object of delivery has left the work or the dispatch readiness is informed.

d. An agreed term of delivery is extended appropriately with measures within the scope of labour disputes, in particular strike and lockout as well as by the entry of unforeseen obstacles which lie beyond the will of the THOME Präzision GmbH, as far as such obstacles are as can be proved on the completion or delivery of the object of delivery of considerable influence. This is also valid if the circumstances enter with undersuppliers.

The precalled circumstances are also not to be represented by the THOME Präzision GmbH if they originate during an already being delay. Beginning and end of such obstacles will inform in important cases of the THOME Präzision GmbH the customer as soon as possible.

e. In case of the delay the customer is entitled to the exclusion of other claims to demand a delay damage. He amounts for every full week of the delay to 0.2%, on the whole, however, at most 3% of the value of that part of the whole delivery which cannot be used as a result of the delay on time or vertragsgemäß.

following Becoming the dispatch by request of the customer delays, become to him, beginning one month after announcement of the dispatch readiness which calculates, at least nevertheless, 0.5% of the invoice amount for every month by the storage to originating costs. Nevertheless, the THOME Präzision GmbH is entitled to dispose after settlement and futile course of an adequate term otherwise of the object of delivery and to supply the customer with appropriately extended term.

g. The observance of the term of delivery puts the fulfilment of the contract – to duties of the customer ahead.

### **4. Retention of title**

a. The THOME Präzision GmbH reserves itself the property in the object of delivery up to the entrance of all payments from the supply agreement. The retention of title remains also exist for all demands which are entitled to the THOME Präzision GmbH from running business connections to the customer.

b. Only customers with suitable industrial concerns are entitled to the wide disposal or subsequent treatment of the product within the scope of her proper business concern. By now the customers resign to us everybody to them from the wide disposal and the business relations to her buyers in connection with the wide disposal to being entitled demands with subsidiary rights for the protection of our claims. The retention of title remains also effective if the object of delivery processes, is mixed or is connected; the THOME Präzision GmbH becomes the fraction owner in the products anew resulted by mixture.

Other orders about the object of delivery are prohibited the customer. Anyhow the customers are entitled to the move of the demands resigned to us and are obliged, as long as we do not revoke this authorisation. However, by request the customers must immediately inform us to whom they have disposed of the product and which demands are entitled to them from the disposal.

c. If the customer comes to default or injures he his obligations from the retention of title, can use the THOME Präzision GmbH the purchase object herausverlangen and after written announcement with adequate term under charge of the utilisation proceed for the purchase price freehand.

### **5. Danger crossing and acceptance**

a. The danger goes over at the latest in sending the parts of delivery on the customer, namely also if part deliveries occur or the THOME Präzision GmbH still other achievements, e.g., the sending costs or transportation and installation has taken over.

b. If the dispatch is delayed as a result of circumstances which the customer has to represent, the danger of the day of the dispatch readiness on the customer goes over; however, the THOME Präzision GmbH is obliged to cause the assurances if requested and costs of the customer this required.

C. Part deliveries are allowed.

### **6. Liability for defects of the delivery**

The THOME Präzision GmbH sticks for the defects of the delivery to which also the absence of expressly assured qualities belongs to the exclusion of other claims regardless of segment 9.d. as follows:

a. All those parts are to be mended free of charge at reasonable discretion of being defeated choice of the THOME Präzision GmbH or to deliver anew, which to itself within 6 months (with Mehrschichtbetrieb within 3 months) since introduction as a result of a fact lying before the danger crossing - in particular because of faulty design, bad building materials or defective implementation - when do not put outside uselessly or in her usefulness as unimportant affected. The statement of such defects is to be announced to the THOME Präzision GmbH immediately in writing. Substituted parts become a property of the THOME Präzision GmbH. If the dispatch, the installation or the introduction are delayed without fault of the THOME Präzision GmbH, the liability goes out at the latest 12 months after danger crossing.

For essential foreign products the liability of the THOME Präzision GmbH limits itself to the cession of the liability claims which you are entitled against the supplier of the foreign product.

b. The right of the customer to assert claims from defects comes under the statute of limitations in all cases from the time of the timely rebuke in 6 months, at the earliest, nevertheless, with expiry of the guarantee term.

c. No guarantee is taken over for the damages which have originated from postfol. – to genden reasons:

Inexpedient or improper use, faulty assembly or initial start-up by the customer or third, natural From – use, faulty or negligent treatment, inexpedient company means, exchange materials, defective edge and interfaces terms, chemical, electro-chemical or electric influence, provided that they are not due to a fault of the THOME Präzision GmbH.



d. To the given name of all of the THOME Präzision GmbH after any judgement inevitably to appearing repairs and spare deliveries the customer has to give the necessary time and opportunity after notification with the THOME Präzision GmbH, otherwise the THOME Präzision GmbH is released from the liability for defects. Only in urgent cases of the danger of the operational safety and to the defence of unreasonably big damages and the THOME Präzision GmbH is to be informed immediately, or if the THOME Präzision GmbH is with the removal of the lack in delay the customer has to let remove the right the lack or by third and to require substitute of the necessary costs from the supplier.

e. From by the repair or spare delivery originate – to the immediate costs carries the THOME Präzision GmbH - in so far as as itself the objection puts outside as entitled - which costs of the spare part including the dispatch as well as the adequate costs of the removal and installation, further, if this can be required for situation of the isolated case rightly, the costs of the possibly necessary Gestellung of his assemblers and assistants., For the rest, the customer bears the costs.

following for the spare part and the repair amounts to the Gewährlei – stungsfrist 3 months. She runs at least up to the expiry of the original guarantee term for the object of delivery.

The term for the liability for defects in the object of delivery is extended by the duration of the business interruption caused by the repair works.

g. By possibly on the part of the customer or third improperly without previous approval of the THOME Präzision GmbH made changes or repair works the liability for the results originating from it is lifted.

h. Other claims of the customer, in particular a claim to substitute of the damages which have not originated in the object of delivery themselves are excluded.

This disclaimer of liability is not valid with intention or coarse carelessness of the owner or leading employees. He is not valid also with the absence of qualities they are expressly assured if the assurance has just aimed to secure the customer against the damages which have not originated in the object of delivery themselves.

#### **7. Liability for accessory obligations**

If the delivered object of the customer as a result of omitted or faulty implementation from before or after completion of the contract to recumbent proposals and consultations as well as other contractual Nebenverpflichtungen - in particular instructions for service and servicing of the object of delivery - vertragsgemäß cannot be used by fault of the THOME Präzision GmbH, the regulations of the segment 6. and 9. are valid to the exclusion of other claims of the customer accordingly.

#### **8. Surely of the customer on resignation and other liability of the THOME Präzision GmbH**

a. The customer can withdraw from the contract if the whole achievement becomes finally impossible for the supplier before danger crossing. The same is valid with incapacity of the supplier. The customer can also withdraw from the contract if with an order of objects of the same kind the implementation of a part of the delivery becomes impossible after the number and he has a legitimate interest in the refusal of a part delivery; if this is not the case, the customer can diminish the consideration accordingly.

b. If achievement delay is given for the purposes of the segment 3., and the customer grants an adequate extension with the explicit explanation to the supplier located in delay that he rejects the acceptance of the achievement at the end of this term, and the extension is not kept, the customer is entitled to the resignation.

C. If the impossibility enters during the acceptance delay or by fault of the customer, this remains to the consideration obliged.

d. The customer has further a right to rescind if the supplier allows to spread an adequate extension put to him for the repair or spare delivery with regard to a lack to be represented by him for the purposes of the terms of delivery by his fault futilely. The right to rescind of the customer exists from in other cases of the Fehlschlagens of the repair or Ersatzlie – ferung by the supplier.

e. All the other further claims of the customer, in particular on change, notice or decrease as well as on substitute are excluded from damages of some kind namely also from such damages which have not originated in the object of delivery themselves.

This disclaimer of liability is not valid with intention or coarse carelessness of the owner or leading employees. He is also not valid with the absence of qualities which are expressly assured if the assurance has just aimed at the customer against damages which have not originated in the object of delivery themselves to secure.

following step of the customers of the bill of sale back, so the following expense allowances are to be paid to the THOME Präzision GmbH:

30% of the order sum with all standard products of the THOME Präzision GmbH.

80% of the order sum with all Sonderanfertigungen of the THOME Präzision GmbH.

#### **9. Surely of the THOME Präzision GmbH on resignation**

For the case of unforeseen events for the purposes of the segment 3.d. of these general terms of business, provided that they change the commercial relevance or the contents of the achievement considerably or have an effect on the company of the THOME Präzision GmbH considerably, and for the case afterwards of turning out impossibility of the implementation the contract is adapted appropriately. As far as this is not defensible economically, stands to the THOME Präzision GmbH the right to withdraw too all or part from the contract.

Compensation claims of the customer because of such a resignation do not exist. If wants to make the THOME Präzision GmbH of the right to rescind use, she has to inform of this after knowledge of the range of the event immediately the customer, namely also if first with the customer a lengthening of the term of delivery was agreed.

#### **10. E-mail**

E-mails serve with the THOME Präzision GmbH of the quick communication. They carry no signatures and can be changed by third. Obliging arrangements are dispatched with the THOME Präzision GmbH as a letter, scanned letter or fax and carry signatures according to the signature regulation applying with the THOME Präzision GmbH.

#### **11. Place of fulfilment, legal venue**

a. Place of fulfilment for all deliveries and payments is of the companies – sit.

b. With all disputes arising from the contractual relationship Darmstadt/Germany is agreed if the customer is an independent commercial agent, a legal entity of the public right or a public law special property as a legal venue.

#### **12. Other**

a. Divergent terms of business of the customer are non-binding for the THOME Präzision GmbH even if these is not expressly contradicted.

b. The language of communication is German. It is worth the right of the Federal Republic of Germany.

c. Should one of the preceding conditions be ineffective, the remaining regulations are not touched from this. The contracting partners have to substitute for an ineffective regulation with an allowed regulation which comes to the sense and the meaning most near the ineffective regulation.