



Rue Gurnigel 48 CH-2501 Bienne Tél.: +41 (0)32 365 51 31 Fax: +41 (0)32 365 76 20 E-mail:

E-mail: info@marcel-aubert-sa.ch

www.marcel-aubert-sa.ch



QC 300 Calculator with video picture

# Integrated image processing with automatic edge detection



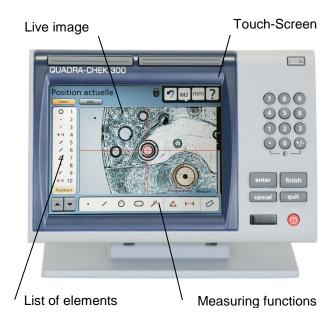
The QC300 combines the capability to observe a live image of the workpiece and to save measurement points on the same system. The QC300 is a compact and ideal solution for applications which otherwise need an additionnal counter or a computer with framegrabber as well as a coordinate measurement device.

All measurement functions and components are displayed on a luminous colour 'Touch-Screen' monitor. The function as well as the basic menu concept turns the QC300 into a reliable and 'easy to use' device.

According to the user choice and the geometrical elements, the measurement points could be taken either with a reticle (crosshair) or with an 'active tool' (this means an automatic detection). In the 'reticle' mode, measurement points don't need to be confirmed and could be automatically validated as soon as the table is not moving and after a pre-determined detection time.

## **Control panel:**

The QC300 combines the basic user interface of the QC200 with an improved programmation of the measuring process (image processing is optional). Illuminators can be activated directly on the monitor. The colour "Touch-Screen" monitor displays the measurement results in a clear and optimal way.



The innovative control panel makes the QC300 easy to use.

All measurements are automatically stored and can be saved with position and shape tolerances.

0 1	Tolerance: Bidirectional								
	I	Nominal	Actual	Deviation (	-Limit	+Limit			
		1.0360	1.0360	0.0000	0.0100	0.0100			
	Y	0.5390	0.5390	0.0000	0.0100	0.0100			
		0.5390	0.5390	0.0000	0.0100	0.0100			

### Data:

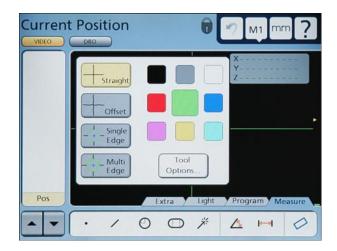
The picture of the workpiece as well as the measured data can be saved on an external disk via the USB interface.

### Image processing:

Image processing functions are available in the Video Mode.

Two different reticules could be choosen, as well as the automatic detection of measurement points.

In 'Reticule' mode, as soon as the table is not moving anymore, some measurement points are automatically taken after the necessary detection time (adjustable).



In 'Auto' Mode, measurement points are detected as soon as the edge is located in the measuring circle. With this function, the view of the operator doesn't affect the measurement anymore.

### Additionnal functions:

The device can (as option) be delivered with a light source command (6 analogue outputs, adjustable with a graphical cursor) as well as a motor zoom command.



#### Protocol:

Results are clearly displayed in a measurement report and can be transmitted via different integrated interfaces (Centronics, R232, USB).

Datum 17/04/06/		6/	Zeit 15:26:12			Pruefer		
Auftrag						Teil _	123-456	
Nr.	ELEMENT	ID	EINHEIT	LAGE	I	GROESSE	FORM	
001	Gerade	1	mm	x =	-0.120	< = 02.41.16	+T = 0.00	
		1	A DMS	¥ =	-0.175		+T = 0.00	
002   Pu	Punkt	2	mm	x =	-0.876			
1		1	A DMS	x =	-0.175	< = 02.41.16	1	
003   Kr	Kreis	3	mm	x =	0.464	r = 3.073	+T = 0.00	
		1	A DMS	x =	-0.073	d = 6.145	+T = 0.00	
004   1	Abstand	4	mm			X = 2.273	 I	
1		1	A DMS			Y = 1.711	1	
005	Gerade	5	mm	x =	-0.0128	< = 38.11.57	+T = 0.00	
		1	A DMS	¥ =	-0.6104		+T = 0.00	
006	Gerade	6	mm	x =	-0.9174	< = 20.01.59	+T = 0.00	
		1	A DMS	¥ =	-0.1820		+T = 0.00	