

# TV 295 touch



## Technical specification

	TV 295 - 160 touch	TV 295 - 384 touch
<b>Imaging performance</b>		
Detector type	Focal Plane Array (FPA), uncooled microbolometer	
Resolution	160 x 120 pixels	384 x 288 pixels
Pixel size/ detector size	25µm / 4 mm x 3 mm	
Spatial resolution (IFOV)	2,73 mrad	25µm / 9,6 mm x 7,2 mm
Thermal sensitivity (NETD)	≤0,08°C at 30°C	1,37 mrad
Field of view (FOV) / min. focus distance	25° x 19° / 0,5 m	≤0,06°C at 30°C
Detector data acquisition	50Hz	
Spectral range	8 ~ 14µm	
Focus / zoom	Manual / 2x, 4x electronic	
<b>Image representation / display</b>		
LC display	3,6" colour-LCD (640 x 480 Pixel)	
Image frequency	50Hz / 60Hz	
CCD camera	3 Mega-Pixel (including photo-LED) Fusion of IR-picture and CCD-picture	
<b>Measurement characteristics</b>		
Temperature range	-20°C ~ +350°C (optional up to +1000°C)	-20°C ~ +600°C (optional up to +1200°C)
Accuracy	± 2°C oder ± 2% (whichever is greater)	
Emissivity correction	Variable from 0,1 to 1,0 (in steps of 0,01)	
Moveable spot / measurement area / line profile	5 / 5 / 2	
Surface areas max.-min. temp. / surface areas mean	√ / √	
Isotherm analysis / temp. difference	√ / √	
Alarm (acoustic / optical)	√ / √	
Colour palette	11	
Image adjustment	Automatic / manual (gain and brightness)	
Ambient temperature influence	Automatic correction according to user input	
Atmospheric interference correction	Automatic correction according to user input	
Other settings	Date, time, temperature unit, language	
<b>Image storage</b>		
Storage medium	MicroSD-Card 8GB (max. 32GB)	
Storage mode	Automatic/Manual single image storage	
File format	JPEG, including thermal measurement data; H.264 in network recording	
Voice annotation	Up to 60 seconds per image	
<b>Power supply</b>		
Recharg. battery / ext. power supply	Yes / Yes (12V DC)	
Battery type	Li-Ion, rechargeable	
Battery operating time	Up to 3 hours continuous operation per battery	
Charging system	Intelligent charger	
Power saving	Automatic power off / sleep mode (user selectable)	
<b>Interfaces</b>		
Video output / audio output	PAL/NTSC /Yes	
USB	Yes	
Other interfaces	√ / √	
<b>Ambient conditions</b>		
Drop resistant	Up to 2 meters	
Storage temperature	-15°C ~ +50°C	
Humidity	≤ 90% non-condensing	
Degree of protection	IP 54	
<b>Physical characteristics</b>		
Dimensions (L x H x W)	245mm x 105mm x 230mm	
Weight (without battery)	1 kg	
Tripod mounting	1/4"-20	
Laser pointer	Class2, 1mW / 635nm (red)	



# TV 294 digital



## Technical specification

	TV 294 - 160 digital	TV 294 - 384 digital
<b>Imaging performance</b>		
Detector type	Focal Plane Array (FPA), uncooled microbolometer	
Resolution	160 x 120 pixels	384 x 288 pixels
Pixel size/ detector size	25µm / 4 mm x 3 mm	25µm / 9,6 mm x 7,2 mm
Spatial resolution (IFOV)	2,73 mrad	1,37 mrad
Thermal sensitivity (NETD)	≤0,08°C at 30°C	≤0,06°C at 30°C
Field of view (FOV) / min. focus distance	25° x 19° / 0,1m	
Detector data acquisition	50Hz	
Spectral range	8 ~ 14µm	
Focus / zoom	Manual / 2x electronic	
<b>Image representation / display</b>		
LC display	2.7" colour-LCD	
Image frequency	50Hz / 60Hz	
CCD camera	1,3 Mega-Pixel	
<b>Measurement characteristics</b>		
Temperature range	-20°C ~ +350°C	-20°C ~ +600°C
Accuracy	± 2°C or ± 2% (whichever is greater)	
Emissivity correction	Variable from 0,1 to 1,0 (in steps of 0,01)	
Moveable spot / measurement area / line profile	4 / 3 / 2	
Surface areas max.-min. temp. / surface areas mean	√ / √	
Isotherm analysis / temp. difference	√ / √	
Alarm (acoustic / optical)	√ / √	
Colour palette	11	
Image adjustment	Automatic / manual (gain and brightness)	
Ambient temperature influence	Automatic correction according to user input	
Atmospheric interference correction	Automatic correction according to user input	
Other settings	Date, time, temperature unit, language	
<b>Image storage</b>		
Storage medium	MicroSD-Card 2GB	
Storage mode	Automatic/Manual single image storage	
File format	JPEG, including thermal measurement data	
Voice annotation	Up to 60 seconds per image	
<b>Power supply</b>		
Recharg. battery / ext. power supply	Yes / Yes (10-15V DC)	
Battery type	Li-Ion, rechargeable	
Battery operating time	Up to 3 hours continuous operation per battery	
Charging system	Intelligent charger	
Power saving	Automatic power off / sleep mode (user selectable)	
<b>Interfaces</b>		
Video output / audio output	PAL/NTSC /Yes	
USB	Yes	
Other interfaces	-	
<b>Ambient conditions</b>		
Drop resistant	Up to 2 meters	
Storage temperature	-15°C ~ +50°C	
Humidity	≤ 90% non-condensing	
Degree of protection	IP 54	
<b>Physical characteristics</b>		
Dimensions (L x H x W)	245mm x 105mm x 230mm	
Weight (without battery)	1 kg	
Tripod mounting	1/4"-20	
Laser pointer	Class2, 1mW / 635nm (red)	

