

VRmagic Intelligent & smartcameras



Intelligent Components by VRmagic run fully autonomously on a Linux operating system. Image processing tasks – such as decisions on position, completeness or quality – are performed directly in the camera. Developers can transfer their own algorithms to the camera conveniently by means of a cross-compiler. Host system and camera have the same API. Intelligent components feature a 300 MHz ARM9 processor running Debian Linux as standard operating system and a 600 MHz DSP with 4800 MIPS. The components are equipped with 128 MB RAM and a 512 MB flash module – both can be extended. A high level of data security is guaranteed by a stable and fast file system (UBIFS). Supported Interfaces:

- 10/100 Mbit Ethernet
- USB 2.0 Host
- Analog Video Output
- General Purpose I/O
- (2 Input/ 3 Output)
- RS232
- CAN-Bus (optional)
- PROFIBUS (optional)

Smart components from VRmagic are equipped with an FPGA-Chip making it possible to preprocess data directly in the camera. Image data can be compressed to reduce the load of the host system. An internal 64 MB buffer prevents loss of image data and optimizes the use of bandwidth when operating multiple USB components. Camera Features:

- Internal 64MB DDR-memory (Ring buffer)
- Lossless bandwidth sharing
- Lossless realtime compression (RLE-encoding)
- Bayer and HQ Bayer filter with RGB24, RGB565 or optimized grey picture
- Highspeed USB 2.0
- Fullspeed USB 1.x

Type	Model	design	color	resolution	FPS	sensor
Intelligent	VRmDC-8	OEM	color	2048x1536	13	CMOS
Intelligent	VRmDC-8	COB	color	2048x1536	13	CMOS
Intelligent	VRmDC-8	PRO	color	2048x1536	13	CMOS
Intelligent	VRmDC-9	OEM	b/w	1280x1024	30	CMOS
Intelligent	VRmDC-9	COB	b/w	1280x1024	30	CMOS
Intelligent	VRmDC-9	PRO	b/w	1280x1024	30	CMOS
Intelligent	VRmDC-12	OEM	color	752x480	69	CMOS
Intelligent	VRmDC-12	OEM	b/w	752x480	69	CMOS
Intelligent	VRmDC-12	COB	color	752x480	69	CMOS

Intelligent	VRmDC-12	COB	b/w	752x480	69	CMOS
Intelligent	VRmDC-12	PRO	color	752x480	69	CMOS
Intelligent	VRmDC-12	PRO	b/w	752x480	69	CMOS
Intelligent	VRmDC-12	eOEM	color	752x480	69	CMOS
Intelligent	VRmDC-12	eOEM	b/w	752x480	69	CMOS
Intelligent	VRmDC-12	eCOB	color	752x480	69	CMOS
Intelligent	VRmDC-12	eCOB	b/w	752x480	69	CMOS
Smart	VRmFC-4	OEM	color	800x600	30	CMOS
Smart	VRmFC-4	OEM	b/w	800x600	30	CMOS
Smart	VRmFC-4	COB	color	800x600	30	CMOS
Smart	VRmFC-4	COB	b/w	800x600	30	CMOS
Smart	VRmFC-4	PRO	color	800x600	30	CMOS
Smart	VRmFC-4	PRO	b/w	800x600	30	CMOS
Smart	VRmFC-6	OEM	color	640x480	132	CMOS
Smart	VRmFC-6	OEM	b/w	640x480	132	CMOS
Smart	VRmFC-6	COB	color	640x480	132	CMOS
Smart	VRmFC-6	COB	b/w	640x480	132	CMOS
Smart	VRmFC-6	PRO	color	640x480	132	CMOS
Smart	VRmFC-6	PRO	b/w	640x480	132	CMOS
Smart	VRmFC-8	OEM	color	2048x1536	13	CMOS
Smart	VRmFC-8	COB	color	2048x1536	13	CMOS
Smart	VRmFC-8	PRO	color	2048x1536	13	CMOS
Smart	VRmFC-9	OEM	b/w	1280x1024	30	CMOS
Smart	VRmFC-9	COB	b/w	1280x1024	30	CMOS
Smart	VRmFC-9	PRO	b/w	1280x1024	30	CMOS
Smart	VRmFC-12	OEM	color	752x480	69	CMOS
Smart	VRmFC-12	OEM	b/w	752x480	69	CMOS
Smart	VRmFC-12	COB	color	752x480	69	CMOS
Smart	VRmFC-12	COB	b/w	752x480	69	CMOS
Smart	VRmFC-12	PRO	color	752x480	69	CMOS
Smart	VRmFC-12	PRO	b/w	752x480	69	CMOS
Smart	VRmFC-12	eOEM	color	752x480	69	CMOS
Smart	VRmFC-12	eOEM	b/w	752x480	69	CMOS
Smart	VRmFC-12	eCOB	color	752x480	69	CMOS
Smart	VRmFC-12	eCOB	b/w	752x480	69	CMOS
Smart	VRmXFC-12	mOEM	color	752x480	69	CMOS
Smart	VRmXFC-12	mOEM	b/w	752x480	69	CMOS
Smart	VRmXFC-12	mCOB	color	752x480	69	CMOS
Smart	VRmXFC-12	mCOB	b/w	752x480	69	CMOS

For more information please take contact with [sdvision](http://sdvision.be).