PLASUS EMICON MC Series

Data Sheet

	EMICON 1 MC / 2 MC	EMICON 3 MC – 8 MC
Number of spectrometer channels	1 - 2	3 – 8
Spectral range	200 - 1100 nm (totally covered by each spectrometer)	
Number of wavelength channels (monitor tracks)	unlimited (selected by software without hardware modification)	
Analysis of monitor tracks	single, combined (+,-, /,*), ratio, average, integral	
Spectral resolution	1.5 nm FWHM	
Minimum time resolution	approx. 15 ms	
Exposure time	1 ms – 65 sec	
Detector	CCD array with 16 Bit A/D converter	
Optical fiber connector	SMA 905	
Analog outputs*	4 x ±10 volts	8 x ±10 volts
Digital outputs*	2 x TTL	4 x TTL
Digital inputs*	2 x TTL	4 x TTL
Electrical connector*	BNC	
Remote control interfaces (optional)	LAN API, Profibus, Digital inputs	
PC connections	1 x USB	
Power supply	5 VDC 2A	5 VDC 5A
Housing	10” desktop box (3U, 42HP)	19” rack mount box (3U, 84HP)
Dimensions [mm]	240 x 135 x 320	345 x 135 x 320
Weight [kg]	2.5	3.5 – 4.5
Software	EMICON multi-channel software	
System requirements	PC Pentium 4, 2.0GHz, Windows© 7/8/10	
Typical applications	PECVD, (reactive) sputtering, etching, HIPIMS, ATM plasmas	
Field of application	QA/QC, process control/development, endpoint detection, fault detection, plasma analysis	

* Other options are available on request

PLASUS EMICON SA Series

Data Sheet

	EMICON 1 SA – 8 SA
Number of spectrometer channels	1 - 8
Spectral range	200 - 1100 nm (totally covered by each spectrometer)
Number of wavelength channels (monitor tracks)	unlimited (selected by software without hardware modification)
Analysis of monitor tracks	single, combined (+,-, /,*), ratio, average, integral
Spectral resolution	1.5 nm FWHM
Minimum time resolution	1 ms
Detector	CCD array with 16 Bit A/D converter
Optical fiber connector	SMA 905
Analog inputs	2 (4, 8) x 0-10 volts (iCoupler)
Analog outputs	4 (8) x 0-10 volts (iCoupler)
Digital outputs	8 (16) x TTL / 24V (Opto-Coupler)
Digital inputs	8 (16) x TTL / 24V (Opto-Coupler)
Remote control interfaces	LAN, digital inputs, (Profibus)
Processor unit	Integrated MPU with EMCON SA operation system
Display	5,7” color touch panel (resistive)
Power supply	5 VDC 4A
Housing	19” rack mount box (4U, 84HP)
Dimensions [mm]	480(w) x 190(h) x 420(d)
Weight [kg]	3.5
Remote administration	EMICON SA Manager software on Windows® 7/8/10
Typical applications	PECVD, (reactive) sputtering, etching, HIPIMS, ATM plasmas
Field of application	process control, QA/QC, endpoint detection, fault detection in production lines

Other options are available on request

PLASUS EMICON HR Series

Data Sheet

	EMICON HR UV-VIS-NIR	EMICON HR UV	EMICON HR VIS	EMICON HR NIR
Spectral range	200 - 860 nm	200 - 440 nm	440 – 670 nm	670 – 860 nm
Number of spectrometer channels	1			
Number of wavelength channels (monitor tracks)	unlimited (selected by software without hardware modification)			
Analysis of monitor tracks	single, combined (+,-, /,*), ratio, average, integral			
Spectral resolution	0.15 nm FWHM			
Time resolution	approx. 15 ms			
Exposure time	1 ms – 65 sec			
A/D converter	16 Bit			
Optical fiber connector	SMA 905			
Analog outputs*	4 x ±10 volts			
Digital outputs*	2 x TTL			
Digital inputs*	2 x TTL			
Electrical connector*	BNC			
Remote control interfaces (optional)	LAN API, Profibus, Digital inputs			
PC connections	1 x USB			
Power supply	5 VDC 5A			
Housing	10” desktop box (3U, 42HP)			
Dimensions [mm]	240 x 135 x 320			
Weight [kg]	3.5			
Software	EMICON software			
System requirements	PC Pentium 4, 2.0GHz, Windows© 7/8/10			
Typical applications	PECVD, (reactive) sputtering, etching, HIPIMS, ATM plasmas			
Field of application	R&D, plasma analysis, process development/optimization/control, endpoint detection, QA/QC			

* Other options are available on request