

Quick Selection Guide für die Erfassung von Messdaten (extern angeschlossen) / for the acquisition of measuring data (externally connected)

Technical Data/ Meas. System	USB-AD16f	AMS42-USB	AMS84-USB	USB-AD12f	USB-AD	USB-PIO	USB-PIO-OEM	LAN-AD16f	AMS42-LAN16f	AMS84-LAN16f
Schnittstelle/Interface	USB	USB	USB	USB	USB	USB	USB	LAN (TCP/IP)	LAN (TCP/IP)	LAN (TCP/IP)
Analogeingänge/Analog inputs	16 (isol.)	8 (isol.)	16 (isol.)	16	16	-	-	16	8	16
Messbereich/Measuring range	±1V, ±2V, ±5V, ±10V	abhängig vom 5B Modul/ depends on 5B module	abhängig vom 5B Modul/ depends on 5B module	±10V	±5V	-	-	±1V, ±2V, ±5V, ±10V	abhängig vom 5B Modul/ depends on 5B module	abhängig vom 5B Modul/ depends on 5B module
Auflösung/Resolution	16 Bit	16 Bit	16 Bit	12 Bit	12 Bit	-	-	16 Bit	16 Bit	16 Bit
Abtastrate/Sampling rate	250kHz	250kHz	250kHz	20kHz, "d2d"	10Hz*	10Hz*	10Hz*	250kHz, "d2d"	250kHz, "d2d"	250kHz, "d2d"
Analogausgänge/Analog outputs	2 (isol.)	-	-	1	1	-	-	2	-	-
Ausgangsbereich/Output range	±10V	-	-	±5V	±5V	-	-	±10V	-	-
Auflösung/Resolution	16 Bit	-	-	12 Bit	12 Bit	-	-	16 Bit	-	-
Ausgaberate/Output rate	*)	-	-	*)	*)	-	-	*)	-	-
Digitaleingänge/Digital inputs**	4	4	4	4	4	24	24	16	16	16
Digitalausgänge/Digital outputs**	4	4	4	4	4	-	-	16	16	16
Zähler/Counter	1 (isol., 16 Bit)	1 (isol., 16 Bit)	1 (isol., 16 Bit)	1 (16 Bit)	-	-	-	1 (19 Bit)	1 (19 Bit)	1 (19 Bit)
Empfindlichkeit/Sensitivity	-	-	-	-	-	-	-	-	-	-
NextView@4 Lite	+	+	+	+	+	+	+	+	+	+
NextView@4 Pro	+	+	+	+	+	+	+	+	+	+
LabVIEW™	+	+	+	+	+	+	+	+	+	+
ActiveX Control	+	+	+	+	+	+	+	+	+	+
Preis in EURO/Price in EURO	449,00	899,00	1199,00	149,00	100,00	49,00	59,00	899,00	1299,00	1599,00
VAT	534,31	1069,81	1426,81	177,31	119,00	58,31	70,21	1069,81	1545,81	1902,81

"d2d" = direct to disk

*) Rechner abhängig/depending on the PC

***) CMOS/TTL kompatibel/compatible

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Technical Data/ Meas. System	PCIe-BASE	PCI-BASEII	PCI-PIO	PC104-AD16
Schnittstelle/Interface	PCIe	PCI	PCI	PC/104
Analogeingänge/Analog inputs	modul-abhängig/ depends on the module	modul-abhängig/ depends on the module	-	16
Messbereich/Measuring range			-	±1V, ±2V, ±5V, ±10V
Auflösung/Resolution			-	16 Bit
Abtastrate/Sampling rate	max. 1MHz, "d2d"	max. 1MHz, "d2d"	-	10µs Wandler/ converter
Analogausgänge/Analog outputs	modul-abhängig/ depends on the module	modul-abhängig/ depends on the module	-	2
Ausgangsbereich/Output range			-	±5V, ±10V
Auflösung/Resolution			-	12 Bit
Ausgaberate/Output rate			-	*)
Digitaleingänge/Digital inputs**	32 (2x16 Bit)	32 (2x16 Bit)	32 (2x16 Bit)	32 (2x16 Bit)
Digitalausgänge/Digital outputs**				
Zähler/Counter	1 (32 Bit)	3 (32 Bit)	3 (32 Bit)	-
NextView@4 Lite	+	+	+	-
NextView@4 Pro	+	+	+	-
LabVIEW™	+	+	+	-
ActiveX Control	+	+	+	-
MS-DOS Programmierung/progr.	-	-	-	+
Preis in EURO/Price in EURO	249,00	149,00	89,00	399,00
Preis incl. 19% Mwst./Price incl. 19%VA	296,31	177,31	105,91	474,81

"d2d" = direct to disk

*) Rechner abhängig/depending on the PC

Technical Data/ Module	MAD16f	MADDA16	MADDA16n	MDA16-4i	MDA16-8i	MCAN
Analogeingänge/Analog inputs	16	16 (isol.)	16	-	-	
Messbereich/Measuring range	±1V, ±2V, ±5V, ±10V	±1V, ±2V, ±5V, ±10V	±1V, ±2V, ±5V, ±10V	-	-	
Auflösung/Resolution	16 Bit	16 Bit	16 Bit	-	-	
Abtastrate/Sampling rate	500kHz (je Modul/ each module)	250kHz	250kHz	-	-	
Analogausgänge/Analog outputs	-	2 (isol.)	2	4 (isol.***)	8 (isol.***)	
Ausgangsbereich/Output range	-	±10V	±10V	±10V	±10V	
Auflösung/Resolution	-	16 Bit	16 Bit	16 Bit	16 Bit	
Abtastrate/Sampling rate	-	*)	*)	*)	*)	
Digitaleingänge/Digital inputs	-	-	-	-	-	
Digitalausgänge/Digital outputs	-	-	-	-	-	
Synchrone Erfassung von analogen und CAN Daten! / Synchronous acquisition of analog and CAN data!						
Preis in EURO/Price in EURO	349,00	349,00	249,00	349,00	499,00	249,00
Preis incl. 19% Mwst./Price incl. 19%VA	415,31	415,31	296,31	415,31	593,81	296,31

***) galvanisch getrennt zur PC Masse/electr. isolated to the PC ground

Quick Selection Guide für 5B Verstärker / for 5B amplifiers

Technical Data/ Amplifier	MA-JUN1	MA-JU1	MA-U	MA-FU	MA-F1	MA-DF1	MA-IF	MA-P09	MA-P12	MA-P15
Galvanische Trennung/ Electrical isolation	+	+	+	+	+	+	-	-	-	-
Spannungsmessung DC/ Voltage measurement DC	±0.5mV..±10V 10 MR	±5mV..±50V 9 MR	±0.5V..±10V 4 MR	100mV..60V (Empfindlichkeit/ sensitivity)	±1V..±50V 4 MR	±1V..±50V 4 MR	±1V..±15V (TTL/CMOS)	-	-	-
Spannungsmessung AC/ Voltage measurement AC	±0.5mV..±10V 10MR	±5mV..±50V 9 MR	±5V, ±10V	-	-	-	-	-	-	-
Strommessung DC/ Current measurement DC	±0.1..±200mA 8 MR	±1..±200mA 6 MR	-	-	±20mA, ±100mA	±20mA, ±100mA	-	-	-	-
Strommessung AC/ Current measurement AC	±0.1..±200mA 8 MR	±1..±200mA 6 MR	-	-	-	-	-	-	-	-
Widerstandsmessung/ Resistance measurement	5..10000Ohm 8 MR	-	-	-	-	-	-	-	-	-
Potentiometermessung/ Potentiometer measurement	±0.5mV..±10V 8 MR	-	-	-	-	-	-	-	-	-
DMS Messbrücke/ Strain gauge measuring bridge	±1..±200mV/V 8 MR	-	-	-	-	-	-	-	-	-
LVDT (ind. Wegsensor)/ LVDT (ind. distance sensor)	0.05..1V/V 4 MR	-	-	-	-	-	-	-	-	-
Abgleichbar/Adjustable	3 Potis	2 Potis	2 Potis	4 Potis	4 Potis	4 Potis	-	-	-	-
Excitation (Spannungsausgang)/ Excitation (voltage output)	±2.5V; 0.1mA, 4mA	5V, ±12V, 4mA	5V, ±12V, 4mA	5V, ±12V	5V, ±7.5V, 4mA	5V, ±12V, 4mA	-	5V, ±9V, 4mA	5V, ±12V, 4mA	5V, ±15V, 4mA
Frequenzeingang/ Frequency input	-	-	-	0..100kHz, 8 MR	-	-	1Hz..100kHz	-	-	-
Filter/ Filter	10Hz, 100Hz, 10kHz	10Hz, 100Hz, 10kHz	1kHz, 20kHz, 50kHz	1Hz, 10Hz, 1kHz	100Hz..10kHz (einstellbar/ adjustable)	100Hz..20kHz (einstellbar/ adjustable)	-	-	-	-
Verstärkerausgang/ Amplifier output	±5V	±5V	±5V	0..5V	±5V	±5V	TTL	-	-	-
Preis in EURO/Price in EURO	199.00	149.00	109.00	169.00	169.00	199.00	169.00	89.00	89.00	89.00
Preis incl. 19% Mwst./Price incl. 19%VA	236.81	177.31	129.71	201.11	201.11	236.81	201.11	105.91	105.91	105.91

MR: Messbereich/measuring range

Quick Selection Guide für Miniaturverstärker / for miniature amplifiers

Technical Data/ Amplifier	MAL-UI	MAL-PT100	MAL-R1K	MAL-SG2/SG5	MAL-SG2/SG5	MAL-THR	MAL-FU	MAL-ISO1/5/10/50	MAL-SEIKA
Galvanische Trennung/ Electrical isolation	-	-	-	-	-	-	+	+	-
Spannungsmessung DC/ Voltage measurement DC	±1V, ±5V, ±10V	-	-	-	-	-	-	±1V / ±5V / ±10V / ±50V	2..2.5..3V
Strommessung DC/ Current measurement DC	±20mA	-	-	-	-	-	-	MAL-ISO1: ±20mA	-
Widerstandsmessung/ Resistance measurement	-	-	0..1kOhm	-	-	-	-	-	-
Frequenzmessung/ Frequency measurement	-	-	-	-	-	-	0..100Hz, 0..1kHz, 0..10kHz	-	-
DMS Messbrücke/ Strain gauge measuring bridge	-	-	-	±2mV/V bzw. ±5mV/V	±2mV/V bzw. ±5mV/V	-	-	-	-
Excitation (Ausgang)/ Excitation (output)	5V	1mA	1mA	5V	5V	-	-	-	5V
Thermoelement/Thermocouple	-	-	-	-	-	0..1250°C	-	-	-
PT100	-	0..300°C	-	-	-	-	-	-	-
Filter/Filter	2-340Hz	8Hz, 80Hz	15Hz	1kHz	1kHz	25Hz, 160Hz	100Hz, 1kHz, 10kHz	160Hz	70Hz, 550Hz
Verstärkerausgang/ Amplifier output	±5V	0..5V	0..5V	±5V	±5V	0..5V	0..5V	±5V	±5V
Preis in EURO/Price in EURO	49.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00	79.00
Preis incl. 19% MwSt./Price incl. 19%VA	58.31	94.01	94.01	94.01	94.01	94.01	94.01	94.01	94.01

MR: Messbereich/measuring range

Quick Selection Guide für Trägerplatten und Verstärkersysteme / for backplanes and amplifier systems

Technical Data/ Backplane, Amplifier system	AP2	AP8a	AMS42	AMS84	AAB-II	BP2	BP2-BOX	BP16
Steckplätze/Slots	2x 5B	8x 5B	8x 5B	16x 5B	8x 5B	2x MAL	2x MAL	16x MAL
Versorgung/Supply	5V; 9-40V	5V; 9-40V	5V; 9-40V	5V; 9-40V	5V; 9-40V	9-40V	9-40V	9-40V; 5V
Eingänge/ Inputs	Klemmen/ terminals	Klemmen/ terminals	beliebig/ user-defined	beliebig/ user-defined	Binderbuchsen/ Binder female	Klemmen/ terminals	Klemmen/ terminals	37-pol. D-Sub Buchse/ female
Ausgänge/ Outputs	Klemmen/ terminals	16-pol. Stiftl./ pin connector	37-pol. D-Sub Buchse/ female	37-pol. D-Sub Buchse/ female	37-pol. D-Sub Buchse/ female	Klemmen/ terminals	Klemmen/ terminals	37-pol. D-Sub Buchse/ female
Überbrückung/ Override	-	8 Direktschal- ter/direct switches	-	-	7 Direktschal- ter/direct switches	-	-	16 jumpers
Befestigung/Installation	Hutschiene/ DIN rail	Hutschiene/ DIN rail	Standalone	Standalone Rack Installation	Einbau in PC möglich/ PC mounting possible	Hutschiene/ DIN rail	Standalone	Standalone
Gehäuse/Housing	-	-	½ x 19" Alugehäuse/ aluminum housing	19" Alugehäuse/ aluminum housing	5 ¼" Alugehäuse/ aluminum housing	-	Kunststoffge- häuse (IP65)/ plastic case (IP65)	Aluminium- gehäuse/ aluminum housing
Preis in EURO/Price in EURO	79,00	279,00	499,00	799,00	399,00	59,00	79,00	199,00
Preis incl. 19% MwSt./Price incl. 19%VA	94,01	332,01	593,81	950,81	474,81	70,21	94,01	236,81