

# DATA LOGGERS

## 8 to 16 Channel Logger

### Models DL-1080 & DL-1081

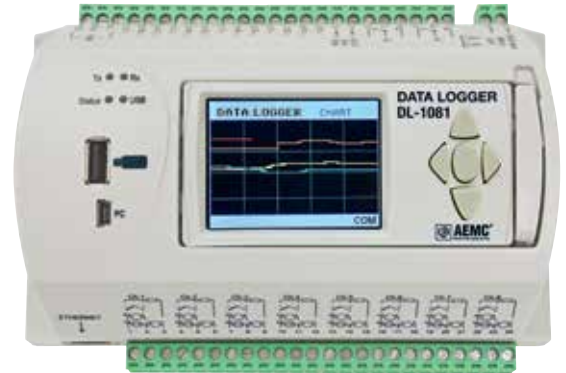
Versatile, powerful and cost effective data loggers handling analog, digital and other types of variables with high resolution and speed

#### ► SPECIFICATIONS

MODELS	DL-1080 & DL-1081			
<b>ELECTRICAL</b>				
<b>Input Type</b>	<b>Measuring Range:</b>	<b>Accuracy:</b>		
J	-184° to 1832°F (-120° to 1000°C)	±0.2% (F.R.) ±1°C		
K	-202° to 2501.6°F (-130° to 1372°C)			
T	-202° to 752°F (-130° to 400°C)			
E	-202° to 1436°F (-130° to 780°C)			
N	-202° to 2372°F (-130° to 1300°C)			
R	68° to 3214.4°F (20° to 1768°C)	±0.2% (F.R.) ±3°C		
S	68° to 3214.4°F (20° to 1768°C)			
B	212° to 3308°F (100° to 1820°C)			
Pt100	-328° to 1562°F (-200° to 850°C)	±0.15% (F.R.)		
Pt1000	-328° to 1562°F (-200° to 850°C)			
Linear 0 to 20mA	User Programmable	±0.15% (F.R.)*		
Linear 4 to 20mA				
Linear 0 to 20mV				
Linear 0 to 50mV				
Linear 0 to 60mV				
Linear -20 to 20mV				
Linear 0 to 5V				
Linear 0 to 10V				
<b>Digital Inputs</b>			Logic level "0": from 0 to 0.8Vdc Logic level "1": from 3 to 30Vdc	
<b>Internal Memory</b>			2MB	
<b>Excitation Current</b>	Pt100s: 360µA; ; Pt1000s: 320µA			
<b>Maximum Pt100/Pt1000 Compensated Cable Resistance</b>	40Ω			
<b>Maximum Input Voltage</b>	30Vdc			
<b>Input Current @ 30Vdc (typical)</b>	3mA			
<b>Digital Outputs</b>	Maximum output voltage: 30Vdc Maximum output current: 200mA Maximum relay current: 3A @ 250Vac; 3A @ 30Vdc			
<b>Storage Rate</b>	from 1 ms to 24 hours			
<b>Maximum Channel Logged</b>	100			
<b>Supported Modbus Commands</b>	Read Coil Status (01h) Read Holding Registers (03h) Write Single Coil (05h) Write Single Register (06h) Write Multiple Registers (0Fh)			
<b>Power Supply</b>	100 to 240Vac, 50/60Hz. 20VA (max)			
<b>ENVIRONMENTAL</b>				
<b>Operating Temperature</b>	32° to 122°F (0° to 50°C)			
<b>Relative Humidity</b>	80% up to 85°F (30°C) For temperatures higher than 85°F (30°C), decrease 3% per °C			
<b>Altitude</b>	< 6500ft (2000m)			
<b>Protection</b>	IP20			

F.R. = Full Range

\*The full scale refers to the input of the sensor signal and not the range of configured indication.



Inputs rated CAT II



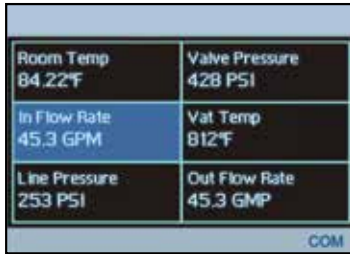
#### ► FEATURES

- 8 universal analog input channels
- 8 digital I/Os (individually configured as inputs or outputs)
- 2 relay outputs (NO, NC and common)
- RS485 interface (Modbus master or slave)
- 24Vdc output to power up to eight 4 to 20mA transmitters
- Ethernet interface for LAN and internet use
- USB-device interface for configuring, monitoring and download
- USB-host interface for logged data retrieval through a USB flash drive
- Up to 32 configurable alarms
- Up to 128 virtual channels
- Detachable display (optional)
- Up to 100 channels can be logged at a configurable rate
- Includes FREE software for data storage, real-time display, analysis and report generation
- 4 input channel types: analog, digital, remoted and virtual
- 16GB SD card interface

# Model DL-1081

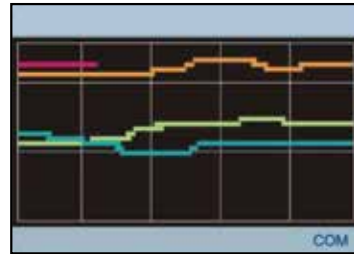
## Color Functional Displays

### "FAVORITES" Screen



Shows a six-position grid where you can assign a channel to be displayed real-time in each position.

### "CHART" Screen

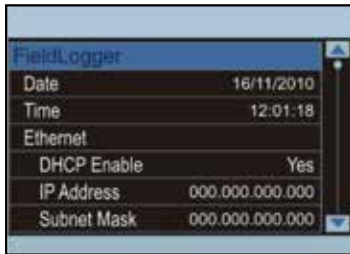


Displays a plot of the favorite channels values.

### Software Screens



### "CONFIGURATION" Screen



Data logger and display parameters can be changed and viewed on this screen.

### "ALARMS" Screen



A 32-position grid where each numbered position is related to its equivalent alarm or event. When an alarm is active, its number will be displayed in red on this screen.



### ▶ PRODUCT INCLUDES

▶ DL-1080 & DL-1081 software  
USB drive supplied with software, drivers and user manual

CATALOG NO.	DESCRIPTION
2134.61	Data Logger Model DL-1080 (8 Analog to 8 Digital Channel, no LCD)
2134.62	Data Logger Model DL-1081 (8 Analog to 8 Digital Channel, LCD)



# DATA LOGGERS

## Probe Selection Chart

AEMC MODEL NUMBER	AEMC CATALOG NUMBER	PROBE OUTPUT	PROBE RANGE	MAX RANGE FOR SLII	CABLE DIAMETER	BUS BAR SIZE	OUTPUT CONNECTION	USED WITH LOGGER MODEL	NOTES
MN261	2115.82	100mV/AAC 10mV/AAC	0.1 to 24AAC 0.5 to 240AAC	10AAC 100AAC	0.78" (19.8mm)	N/A	Lead w/BNC	L101 L102 L562	—
JM830A	2110.83	0.333mA/AAC	1 to 2400A	2400A	2.52" (64mm)	1.97 x 5.31" (50 x 134.87mm)	Lead	L111	—
JM861	2110.90	10mV/AAC 1mV/AAC 0.1mV/AAC	1 to 30AAC 1 to 300AAC 1 to 3000AAC	30AAC 300AAC 3000AAC	2.52" (64mm)	1.97 x 5.31" (50 x 134.87mm)	Lead w/BNC	L101 L102 L562	—
MF 300-6-2-10	2126.81	100mV/AAC 10mV/AAC	30AAC 300AAC	10AAC 100AAC	1.77" (44.96mm)	2.25 x 0.75" (57.15 x 19.05mm)	Sensor w/BNC	L101 L102 L562	—
300-24-2-1	2112.88	100mV/AAC 10mV/AAC	5 to 30A 5 to 300A	10A 100A	8" (203.2mm)	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
1000-24-1-1	2112.39	1mV/AAC	5 to 1000A	1000A	8" (203.2mm)	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
1000-24-2-1	2112.98	10mVAC 1mV/AAC	5 to 100A 5 to 1000A	100A 1000A	8" (203.2mm)	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
1000-36-2-1	2113.00	10mVAC 1mV/AAC	5 to 100A 5 to 1000A	100A 1000A	11" (279.4mm)	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
3000-24-2-0.3	2114.87	3.3mV/AAC 0.3mV/AAC	5 to 300A 5 to 3000A	300A 3000A	8" (203.2mm)	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
6000-36-2-0.1	2113.21	1mV/AAC 0.1mV/AAC	5 to 600A 5 to 6000A	600A 6000A	11" (279.4mm)	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
30000-24-2-0.1	2113.33	1mV/AAC 0.1mV/AAC	5 to 3000A 5 to 30,000A	1000A 10,000A	8" (203.2mm)	N/A	Sensor w/Banana Plugs	L101 L102 L562	Must use adapter # 2118.46
MN01	2129.17	1mA/AAC	2 to 150A	150A	0.39" (9.9mm)	N/A	Lead	L111	—
MN02	2129.20	1mA/AAC	50mA to 100A (1Ω) 50mA to 90A (10Ω)	100AAC	0.39" (9.9mm)	N/A	Lead	L111	—
MN03	2129.18	1mV/AAC	2 to 100AAC	100AAC	0.47" (11.94mm)	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
MN93-BK	2140.32	5mV/AAC	2 to 240AAC	200AAC	0.8" (20.32mm)	N/A	Proprietary	L104 L564	—
MN193-BK	2140.36	200mV/AAC 10mV/AAC	5 to 100AAC	5A 100A	0.8" (20.32mm)	N/A	Proprietary	L104 L564	—
MN251	2115.77	1mV/AAC	0.5 to 240A	240AAC	0.78" (19.81mm)	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
MN255	2115.81	100mV/AAC 10mV/AAC	0.1 to 24AAC 0.1 to 240AAC	10AAC 100AAC	0.78" (19.81mm)	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46

AEMC MODEL NUMBER	AEMC CATALOG NUMBER	PROBE OUTPUT	PROBE RANGE	MAX RANGE FOR SLII	CABLE DIAMETER	BUS BAR SIZE	OUTPUT CONNECTION	USED WITH LOGGER MODEL	NOTES
MN313	2116.25	1mA/Aac	0.1 to 200A	200Aac	0.78" (19.8mm)	0.79 x 0.2" (20.06 x 5.08mm)	Lead	L111	—
MN353	2116.27	10mV/Aac	0.1 to 150A	100Aac	0.78" (19.8mm)	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
MN373	2116.28	1000mV/Aac 10mV/Aac	0.01 to 2.4Aac 0.1 to 200Aac	1Aac 100Aac	0.78" (19.8mm)	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
MN375	2115.41	100mV/Aac	0.1 to 10A	10Aac	0.78" (19.8mm)	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
MN379	2153.01	200mV/Aac 10mV/Aac	5Aac 100Aac	5Aac 100Aac	0.78" (19.8mm)	N/A	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
SR193-BK	2140.33	1mV/Aac	1 to 1200A	1000Aac	2" (50.8mm)	N/A	Proprietary	L104 L564	—
SR604	2113.44	1mA/Aac	0.1 to 1000A	1000Aac	2.05" (52.07mm)	N/A	Lead	L111	—
SR661	2113.49	1mV/Aac 10mV/Aac 100mV/Aac	1000Aac 100Aac 10Aac	1000Aac 100Aac 10Aac	2.13" (54.1mm)	N/A	BNC	L101 L102 L562	—
SR752	2116.32	1mV/Aac	100mA to 1000A	1000Aac	2.05" (52.07mm)	1.96 x 0.19" (49.78 x 4.83mm)	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46
SR759	2116.33	1000mV/Aac 100mV/Aac 10mV/Aac 1mV/Aac	1mA to 1Aac 10mA to 10Aac 0.1 to 100Aac 1 to 1000Aac	1Aac 10Aac 100Aac 1000Aac	2.05" (52.07mm)	1.96 x 0.19" (49.78 x 4.83mm)	Lead w/Banana Plug	L101 L102 L562	Must use adapter # 2118.46



**Banana (female) BNC (male) (XM-BB)**

**Catalog #2118.46**  
(optional for AmpFlex® & FlexProbe®  
Flexible Current Probes)