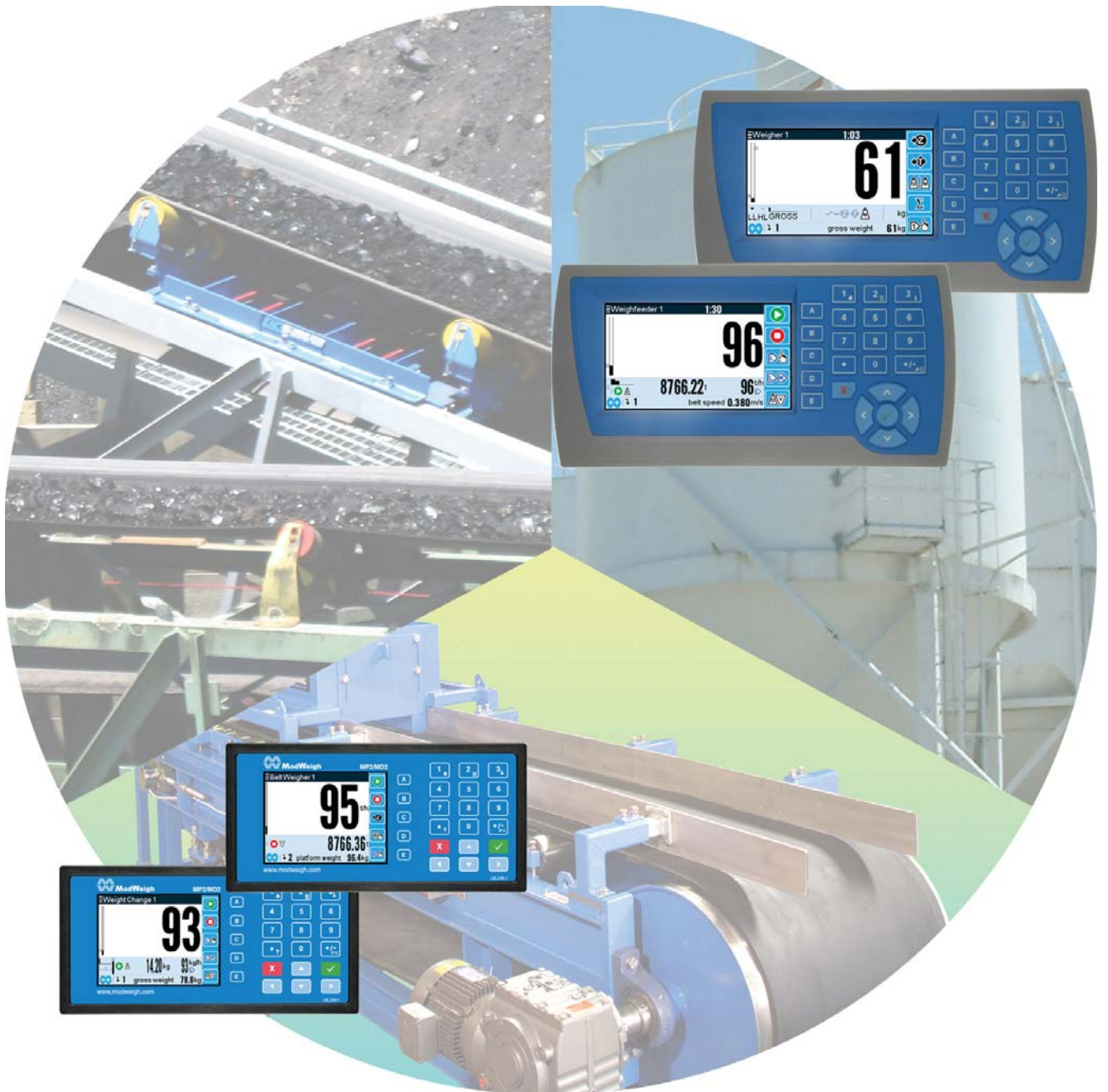


# EMC ModWeigh Weigh Processors

## Digital Continuous Weighing Processors and Static Weighing Instruments



# EMC ModWeigh System Introduction




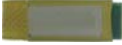
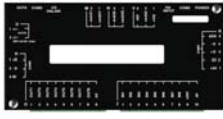

EMC's unique ModWeigh Series of Continuous Weighing Processors and Static Weighing Instruments provide users with a modular system that is highly accurate, cost-effective and easy. Models are available for the following applications:

- **MK61A Weigher System**
- **MK93A Weight Change System**
- **MK94A Impact Weigher System**
- **MK95A Belt Weigher System**
- **MK96A Weigh Feeder System**

ModWeigh systems are fully digital, with no potentiometers or dip switches, and combine low drift with high accuracy - typically better than 0.01%. They provide excitation supply (5Vdc) for up to 10 loadcells and include Modbus comms (independent RS232 & RS485 ports).

With a choice of Display, built-in or remote Transmitter, built-in or remote I/O, and Panel or DIN Rail mounting options, ModWeigh is a truly versatile system that allows you to build the optimum system for your application.

## Key ModWeigh Components

	MD1 Display MP1 Processor	<ul style="list-style-type: none"> <li>■ 208 x 104 x 38mm (cut-out 186 x 92mm)</li> <li>■ 109mm colour LCD, 480 x 272 pixels</li> <li>■ Silicone tactile keypad</li> <li>■ 1 loadcell connector (MP1)</li> </ul>
	MD2 Display MP2 Processor	<ul style="list-style-type: none"> <li>■ 144 x 72 x 109mm (cut-out 138 x 67mm)</li> <li>■ 70mm colour LCD, 320 x 240 pixels</li> <li>■ Polyester film tactile keypad</li> <li>■ 4-20mA output, 1 digital input &amp; 2 digital outputs (MP2)</li> <li>■ 1 loadcell connector (MP2)</li> </ul>
	MT1 Transmitter	<ul style="list-style-type: none"> <li>■ 136 x 66 x 50mm</li> <li>■ 4 loadcell connectors &amp; 1 tacho input</li> <li>■ Mounts on rear of MP1 or remotely on DIN Rail</li> </ul>
	MWxxx P-module	<ul style="list-style-type: none"> <li>■ Optional removable P-module (MT1 only). Holds Product Key and Calibration settings</li> </ul>
	MR1 I/O Module	<ul style="list-style-type: none"> <li>■ 136 x 66 x 30mm (for MP1 &amp; MT1 only)</li> <li>■ 8 digital inputs &amp; 8 digital outputs</li> <li>■ 4-20mA input (or 0-10V) &amp; 2 x 4-20mA outputs</li> <li>■ Pulse output</li> <li>■ Mounts on rear of MP1 or remotely on DIN Rail</li> </ul>
	MO3 I/O Card	<ul style="list-style-type: none"> <li>■ I/O PCB - fits inside MP2</li> <li>■ 4 digital inputs &amp; 4 digital outputs</li> <li>■ 4-20mA input (or 0-10V)</li> <li>■ 4-20mA output</li> </ul>

## MK61A Weigher System

MK61 ModWeigh Weigher Systems are state of the art weighing instruments that can be used with any strain-gauge loadcell based weighing system.

Typical applications include Silo and Tank weighing, Batch weighing, Platform Scales, etc.



EMC Vessel Weighing System



## MK93A Weight Change System

The MK93A Weight Change System is used to control the flowrate of material passing through a weigh hopper and flow regulator. Common flow regulators used for these systems are augers or rotary valves.

The processor is suitable for systems where the flow regulator removes material from a weigh hopper (weight loss system) and systems where the flow regulator adds material to the weigh hopper (weight gain system).



EMC  
Loss-in-Weight  
Salting System



## MK94A Impact Weigher System

The MK94A Impact Weigher System is used to measure the flowrate of free flowing solids.

It measures the impact force of material striking an inclined plate and converts this to a flowrate. This is integrated to give a total weight of material.



Typical Impact  
Weighing System



## MK95A Belt Weigher System

EMC MK95A Belt Weigher Systems are used to measure the flowrate of material carried by a belt conveyor.

They measure the belt loading and belt speed and calculate the material flowrate and totals.



EMC Single  
and Dual Idler  
Belt Weighers



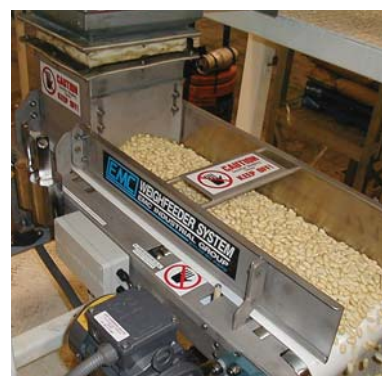
## MK96A Weigh Feeder System

An EMC MK96A Weigh Feeder System is used to measure and control the flowrate of material carried by a weighing conveyor.

It measures the belt loading and belt speed and calculates the material flowrate which it controls by varying the belt speed.










EMC Weigh  
Feeder System



# ModWeigh System Ordering

Each ModWeigh System includes a Product Key and Base Hardware. It may also include I/O options and Accessories.

Simply select the required codes from the tables below to make up a System code, e.g: **MK95A,MT1,MD1,MR1,MAT**

Product Key	MK61A, MK93A, MK94A, MK95A, MK96A,			
Base Hardware	MP2,	MP1,	MT1,MD2,	MT1,MD1,
				
LCD colour display	70mm	109mm	70mm	109mm
Display panel size (cut out)	144 x 72mm (138 x 67mm)	208 x 104mm (186 x 92mm)	144 x 72mm (138 x 67mm)	208 x 104mm (186 x 92mm)
Environmental protection: facia / panel seal / other	IP65 / IP54 / IP20	IP65 / IP65 / IP20	IP65 / IP54 / IP20	IP65 / IP65 / IP20
Trade approvals	-	-	-	●
Excitation for 1-10 loadcells	●	●		●
Corner adjustment	-	-		●
Corner balancing	-	-		●
Optional P-module	-	-		●
Pulse input	PNP (IN0)	PNP (IN0)	PNP / NAMUR / AC (IN0)	
24V digital input	1 (IN9)	-	1 (IN9)	
24V digital output	1 (OUT9)	-	1 (OUT9)	
Isolated pulse output	1 (OUT0)	-	-	
4-20mA output	1 (AO1)	-	-	
USB	device	device / host	device / host	
I/O options	MO3, (for MP2 only)	MR1, (for MP1 & MT1 only)	ModWeigh Accessories	
				
24V digital inputs	4	8	RJ12 Cable 2m (COM1 cable)	<b>MAC</b>
24V digital outputs	4	8	RJ12 to 9 pin D-connector adaptor (ModWeigh to PC)	<b>MAD</b>
4-20mA input	1 (AI2)	1 (AI2)	RJ12 to 25 pin D-connector adaptor (ModWeigh to printer)	<b>MAP</b>
4-20mA output	1 (AO2)	1 (AO1,AO2)	DIN Rail mount kit (included with MT1 & MR1)	<b>MAR</b>
Isolated pulse output	-	1 (OUT0)	Stack mount kit (included with MT1 & MR1)	<b>MAS</b>
USB	host	-	RS485 Line Terminator	<b>MAT</b>

+61 8 6314 1111  
 support@automation-control.com.au  
 automation-control.com.au  
 22 Beneficial Way, Wangara WA 6065



EMC Industrial Group 