6004|MF

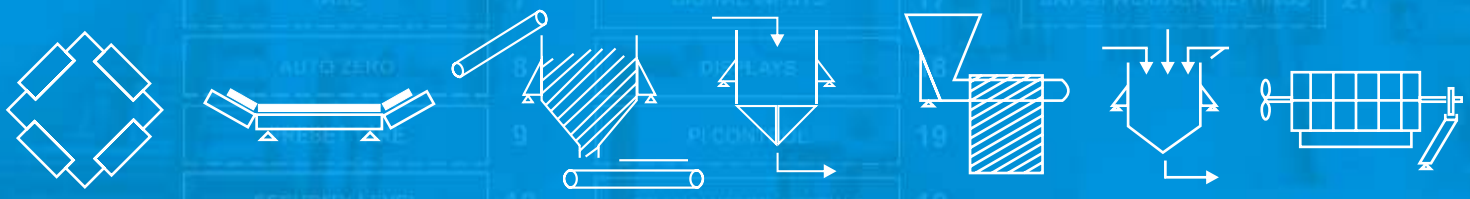
Multi Function Weighing Transmitter

• Introduction

Welcome to the weighing electronics world of the Multi-Function Model 6004|MF. Using the latest ARM microprocessor technology we are now able to offer a powerful, compact, field-mount unit that you can select for a variety of weighing functions at a cost-effective price. The main advantage to the user, servicing organisation or marketing company is having one electronic unit that can be used for almost any application in the weighing industry.

• Applications

- Loadcell Transmitter
- Beltweigher
- Loss-in-weight Transmitter
- Through-put Weigher
- Bag-filler
- Batchweigher
- Dynamometer



Features

Rugged, powder coated, cast Aluminum IP65 housing with splashproof keypad
Clear 20mm 6-digit LED main display & auxiliary information LCD display
Inputs from loadcell, incremental encoder & six digital
Powerful ARM microprocessor with integral clock & USB I/O port
Programming, keypad using LCD or PC via USB with supplied software
User-programmable function keys, digital inputs and relay outputs
Precalibration of sensitivity and range, zero trim and deadweight span trim
Lineariser 16-point, min/max hold, auto-zero maintenance, preset tare
PI control with auto-manual setpoints, bumpless transfer, anti-reset wind-up
Bootloader for remote firmware updates and program specials fields
Outputs for isolated analog 1-5/0-10Volts or 0/4 - 20mA
Power supply 95-265Vac switchmode or 10-30Vdc isolated

Options

Output electro-mechanical relay or photomos 2, 4 or 6, plug & play, programmable functions
Serial outputs, RS232, RS485, plug & play
Formats in ASCII, Modbus or do-it-yourself Buildabus
SD memory card for storing commissioning setup or data logging
GPS, factory fit, for accurate position recording with on-board weighing

Specifications

Display

Main Display : 6 digit, -199 999 to 999 999, 20mm red LED
Auxiliary display : Graphic backlit LCD

Operation and Programming

Programming via on-board LCD and Keypad, USB and SD Card port for alternate programming and setup information storage and data logging
Field firmware upgrades and customerisation on site via SD Card
Bootloader for remote internet firmware updates and program specials

Input Amplifier

20 Bit serial Analog to Digital convertor
Zero 0.1µV/°C, Span 20ppm typical.
Conversion rate ±8/second, link selectable.
Sensitivity selection in mV//V.

Excitation

Selectable for SET value for external excitation source or MEASURE for internal excitation source with value programmable from 3.5V to 12Vdc as measured on the sense terminals

Digital Inputs

Encoder and six digital inputs for potential free contacts

Analog Outputs

Isolated 0-5/10Volt, 0/4-20mA
16 bit Digital to Analog convertor
Repeatability 0.01%FS ±1 count

Communications

Isolated USB standard, optional Isolated RS232 or RS485.
ASCII protocol

Relay Ouputs

Optional two, four, six elecro-mechnical 2A, 230Vac change-over
Two, four, six solid state photomos 0.5A 400V ac/dc normally open

Power Supply

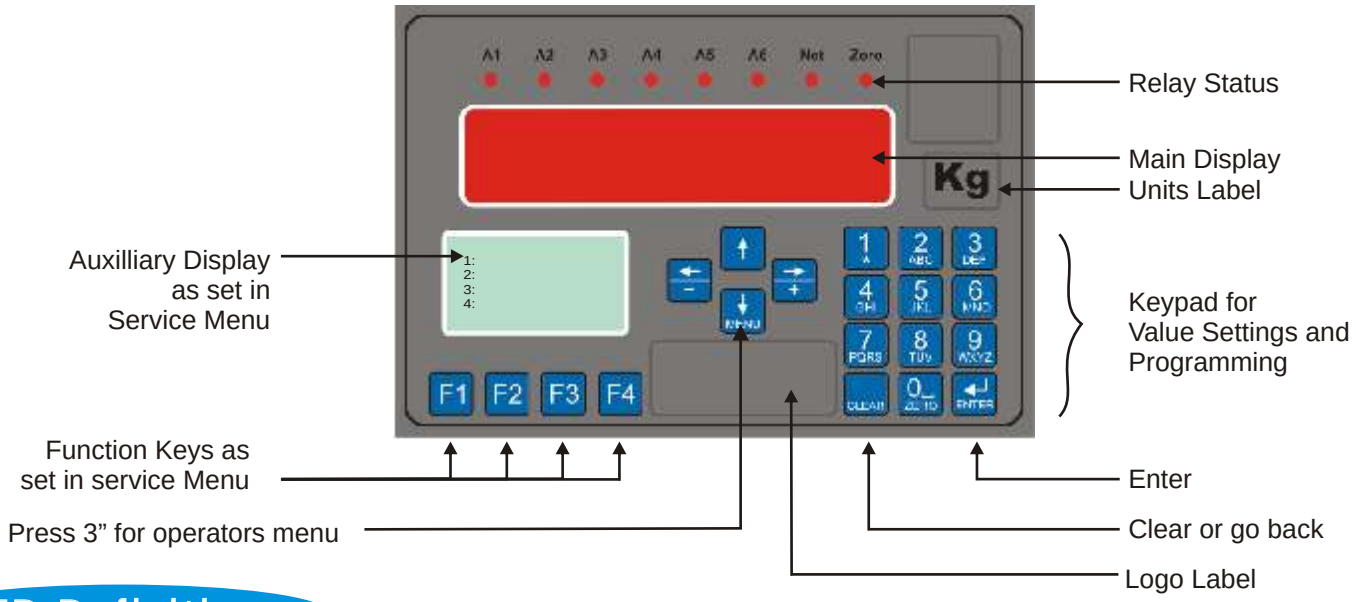
95-265 Vac or 10-30 Vdc isolated. Consumption about 10VA

Regulatory Compliance

Conforms to EC Directives 9/33/EEC and 73/23/EEC

Display and Controls

Keypad during run/programming mode



LED Definitions

A1 A2 A3 A4 A5 A6 — Output relay status

Net — Main display in net mode

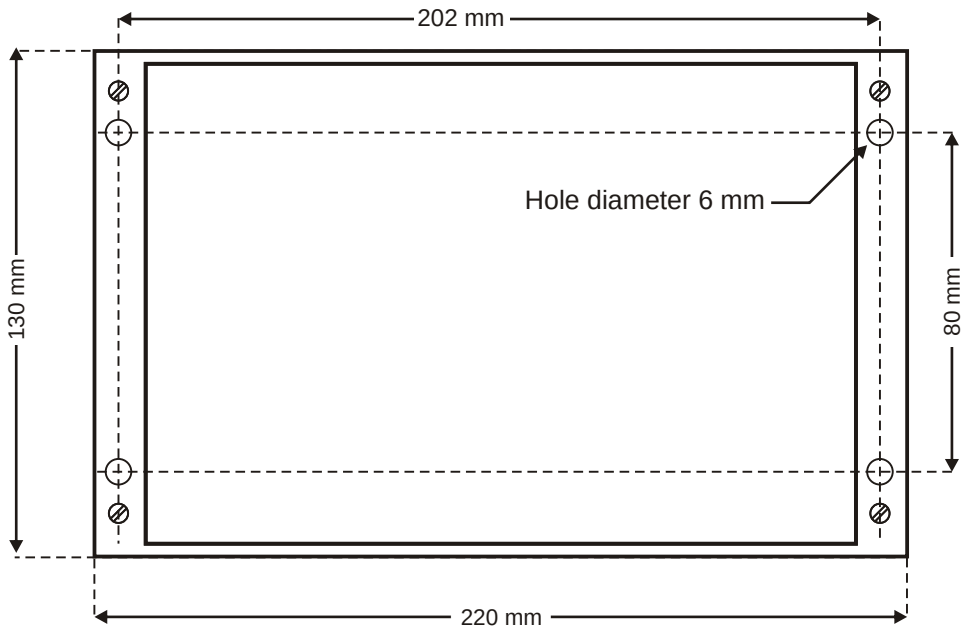
Zero — Net display value is zero

Relay energised: Normal = LED on, Inverted = LED off

↕	Scroll through menus
↔	Scroll through options
Key	Key in values (Alpha numeric)
Display	Display only
↵	Enter values *or* open function blocks

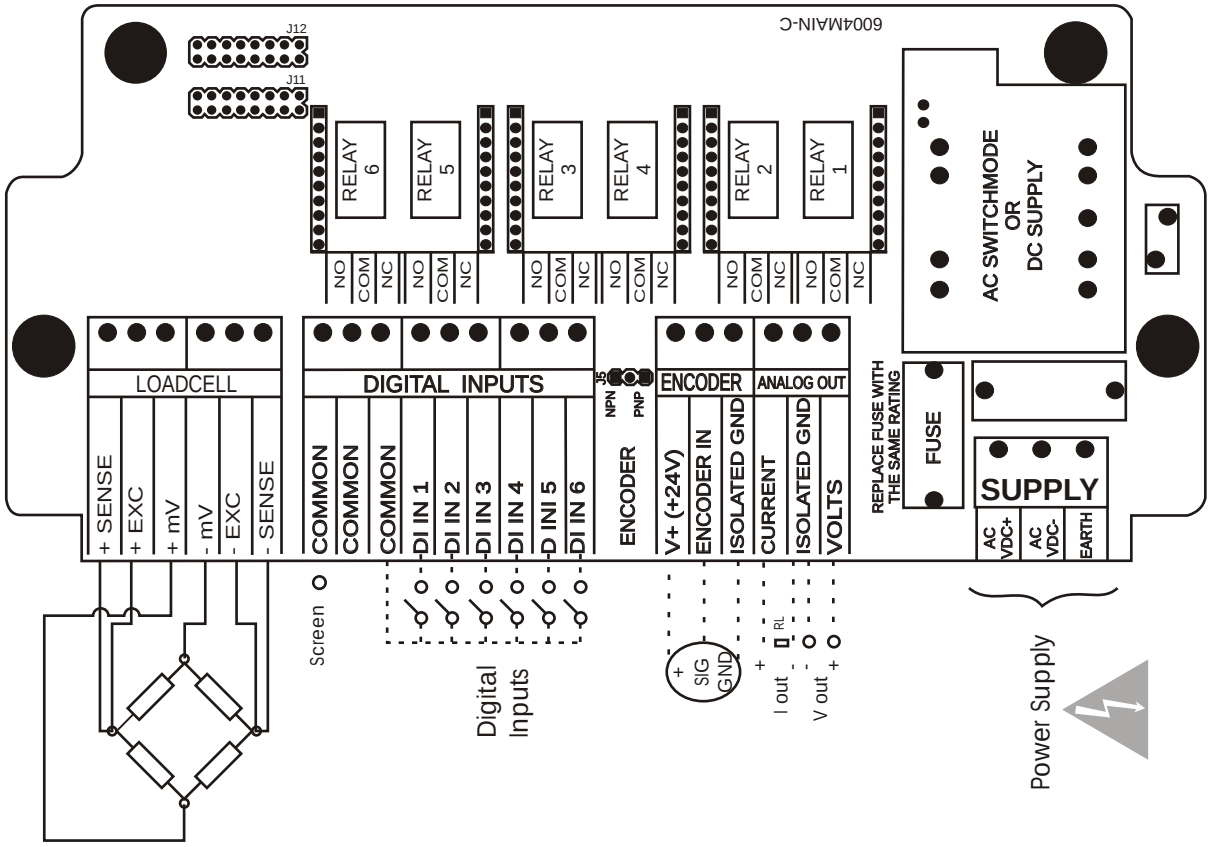
Dimensions

- The housing trim covers need to be removed to gain access to the mounting holes.
- Not to Scale.
- Height of 130 mm, excludes cable glands
- Depth of 70 mm



Wiring Connections

Wiring connections, jumpers and fuse replacement



GUARANTEE

This product is guaranteed against faulty workmanship or defective material, for a period of two (2) years from date of delivery. The manufacturer undertakes to replace without charge all defective equipment which is returned to them (transportation costs prepaid) during the period of guarantee provided there is no evidence that the equipment has been abused or mishandled in any way.

INSTROTECH
INSTRUMENTATION AND PROCESS CONTROL