



# 4-20mA Outputs

Analogue Signal Conditioning Board for  
VMEbus and Mini-Module Systems

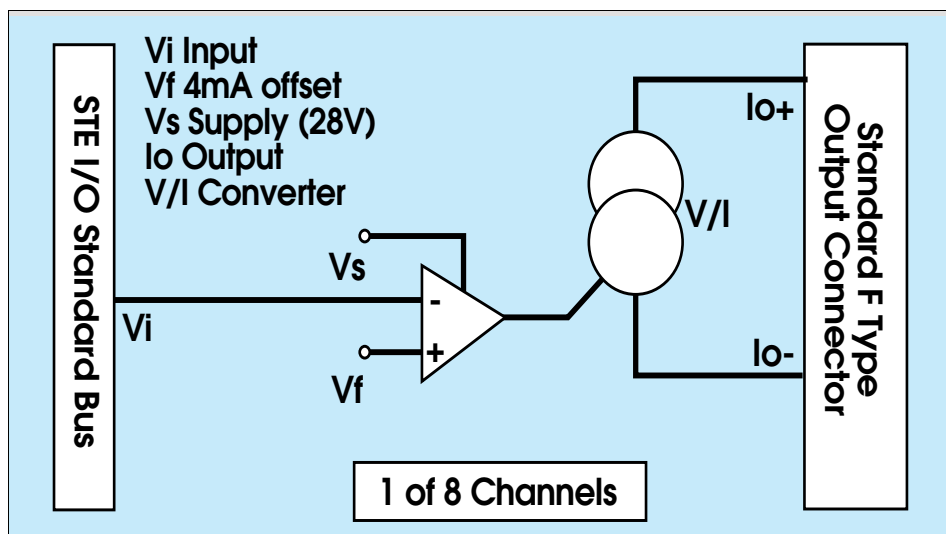
## Features

- 8 analogue output channels
- 12-bit accuracy 4-20mA outputs
- Industrial standard I/O bus
- Loop drive voltage up to 30 Volts
- Link selectable 4-20mA loop supply options
- Type 'F' DIN connector
- Compatible with F-Screw board F-010
- 3U single height euro-card

## Description

The A-601 card converts a voltage output from a Digital to Analogue converter into a current where 0.000 Volts produces 4mA and -9.980 Volts produces 20mA. The 4-20mA standard is used through out industry as a high noise immune method of transmitting analogue data. There are a whole range of transducers and actuators based on this standard. This card in conjunction with the A-120 4-20mA input card allows the V-354 and K-354 to be used with a 4-20mA system.

The A-601 connects to the Digital to Analogue converter using a 50 way ribbon cable. Screw terminal connections to external plant are made through a small F-Screw board, connecting to the 48 way DIN 41612 type 'F' connector on board. The power for the current loop can be provided from the system (12 Volts maximum) or from the user's 28 Volt supply depending on the link settings.



Applications include industrial and laboratory applications using the universal 4-20mA current loop outputs, linear control of motors, heaters, valves, temperature, pressure etc.

## Specification

### Outputs to plant

4 to 20mA loop

### Inputs from analogue card

0 to -9.980 Volts

### Number of channels

8

### Output Supply, Vd

+12 Volts on board or +28 Volts external, link selectable

### Vd max. (continuous)

30 Volts

### Vd Absolute Maximum

36 Volts

### Output Compliance

(Vd-5) Volts

### Output Protection

Diode clamps to Vd and ground

### Connectors

50 way IDC I/O bus

48 way DIN 41612 type 'F'

### Power requirement

+12 Volts 180mA (max.)

-12 Volts 20mA

### Temperature

0 to 55 degC

### Humidity

0 to 90% RH (non condensing)

### Size

3U euro-card, 100\*160mm

## Order Codes

A-601	4-20mA Output card
A-120	4-20mA Input card
F-010	F-Screw card
V-354	VMEbus Analogue Board with DACs
K-354	Mini-Module Analogue Board with DACs

### Miscellaneous

MA-601	Technical Manual
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