

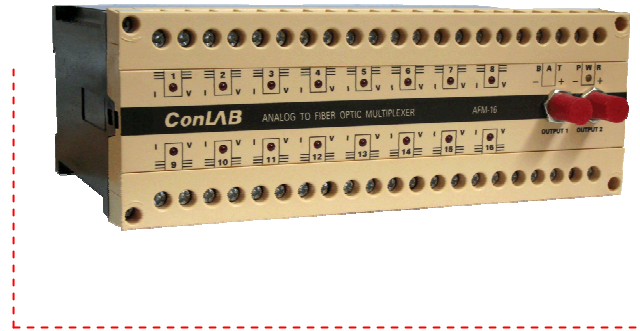
ANALOG TO FIBER-OPTIC MULTIPLEXER — AFM-16

16, 4-20 mA INPUTS

2 FIBER OPTIC OUTPUTS

HIGH ACCURACY

MICRO-PROCESSOR BASED



The AFM-16 analog multiplexer receives 16 process current inputs and output them sequentially via two parallel fiber-optic outputs.

The AFM-16 instrument is an all sold-state unit offering outstanding reliability.

The multiplexer is controlled by a micro-processor which handles the scan-rate, the data conversion, the output transmission and the power supply/battery back-up.

The selected input digitally converted at 12 bit resolution and transmitted by two fiber optic LED transmitters connected in parallel in a transfer rate of 345 Kbaud.

The AFM-16 supervises the system power sources. The unit receives two voltage sources. One source is the main 24 Vdc power supply and the second is a 24 Vdc battery back-up input.

The AFM-16 continuously monitors the main supply and routes it to a continuous system use consisting of

the AFM-16 multiplexer and via it to all the analog transmitters connected.

When power fail is detected, the AFM-16 enters to power saving mode by applying the back-up battery as the system power supply for one second operation every three minutes.

The transmitted data is tagged with a special code indicating power fail mode of operation.

The AFM-16 is equipped with battery periodically check routine detecting "Low-Battery" status. Alert is provided by special code indicating "battery replacement" alarm.

The AFM-16 routes the power supply for the two-wire transmitters connected via 16 individual 22 mA current limiters which prevent system collapse due to short-circuited input.

The AFM-16 is housed in a polycarbonate enclosure which can be mounted either on a 35 mm standard DIN rail.

INPUTS: 16, 4-20 mA current loops

INPUT IMPEDANCE: 350Ω

OUTPUTS: 2 Fiber optic (main and backup)

FIBER-OPTIC CONNECTORS: ST-3 Type

WAVE LENGTH: 820 - 860 nm

CONVERSION RESOLUTION: 12 Bits

ACCURACY: Better than 0.1% of span

SCAN RATE: 15 mSec/16 channels

DATA TRANSFER RATE: 345.6 KBAUD

POWER SUPPLY:

Main supply: 24 Vdc ±10%

Battery : 21.6 - 24 Vdc

SUPPLY CONSUMPTION: 200mA

INDICATORS:

1 Yellow LED, power "On" indicator

16 Red LED, current inputs' activity

OPERATING TEMPERATURE: 0 - 70°C

STORAGE TEMPERATURE: -25 to +85°C

HUMIDITY: 5 - 95% relative, non condensed

FUSE: 630 mA, 5x20 mm fast blown

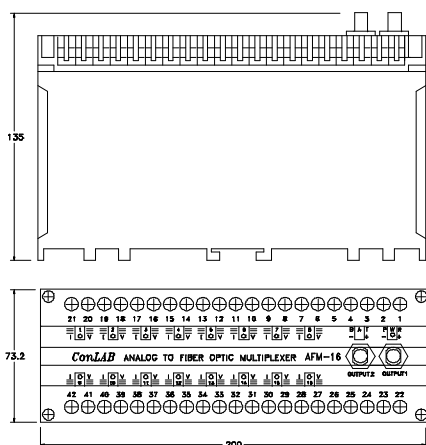
HOUSING: Plastic Polycarbonate

Box: According to IP50 DIN 40050

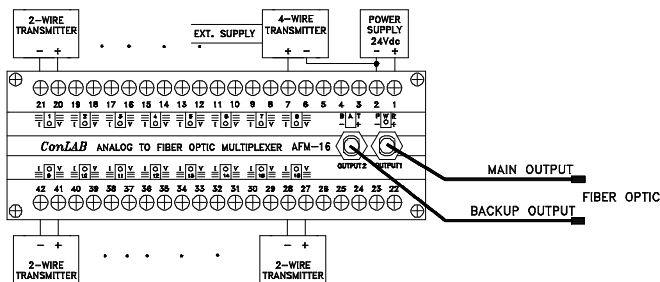
Terminals: According to IP20 DIN 40050

WEIGHT: 0.9 Kg

Dimensions



Connection Diagram



data subject to change without notice

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