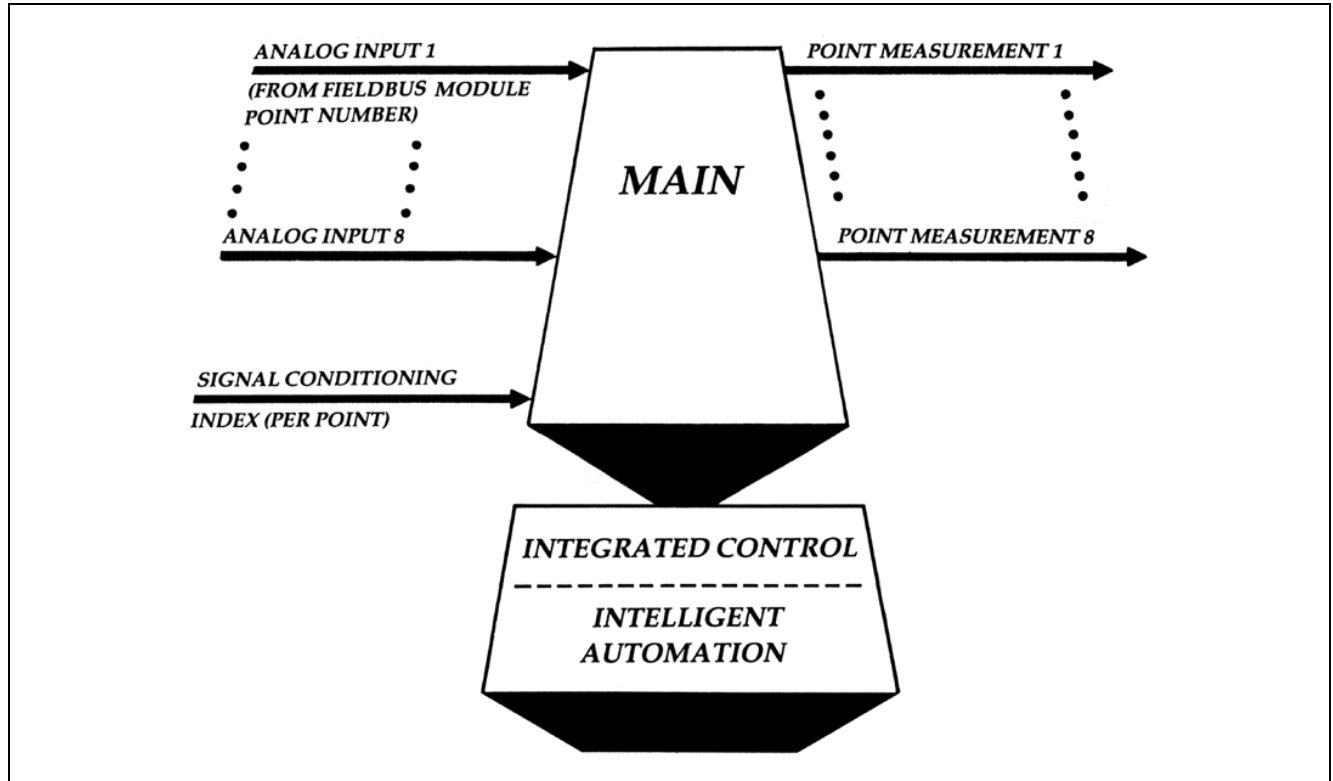


I/A Series[®] Software

Multiple Analog Input (MAIN) Block



The Multiple Analog Input (MAIN) block is a multiple channel signal conditioning block for scanning, filtering, and alarm implementation on field measurements. A single reference junction temperature compensation measurement, generated in the Fieldbus Module, supports thermocouple inputs.

OVERVIEW

The MAIN block reads data in raw counts from up to 8 analog input points from the specified Fieldbus Module. After validation, the raw counts are conditioned and converted into engineering units (in floating point) according to the specified signal conditioning index and engineering units range. The data is optionally filtered and made available at the point measurement output parameter.

STANDARD FEATURES (BLOCK LEVEL)

- Manual/Auto unconditionally asserts all channels to Manual or Auto mode
- Alarm Inhibit disables alarm message reporting of any new alarms, for all channels

Conditioning Index	Signal Conditioning
0	NO CONDITIONING
1	0 to 64 000 raw counts linear
2	1600 to 64 000 raw counts linear (nominal 0 to 10 V dc)
3	12 800 to 64 000 raw counts linear (4 to 20 mA)
4	0 to 64 000 raw counts square root
5	12 800 to 64 000 raw counts square root
6	0 to 64 000 raw counts square root with low cutoff (3/4%)
7	12 800 to 64 000 raw counts square root with low cutoff (3/4%)
8	Type E thermocouple
9	Type E thermocouple EA-2
10	Type J thermocouple
11	Type K thermocouple
12	Type R thermocouple
13	Type S thermocouple
14	Type T thermocouple
16	Type N thermocouple
16	nickel resistance temperature detector (RTD)
17	platinum RTD (SAMA)
18	platinum RTD (DIN)
19	platinum RTD (IEC)
20	copper RTD
21	pulse count to engineering units

STANDARD FEATURES (PER-CHANNEL BASIS)

- Bad input point detection and handling
- Last good value retention

OPTIONS (BLOCK LEVEL)

- Temperature compensation measurement

OPTIONS (PER-CHANNEL BASIS)

- Selectable signal conditioning
- First or second order filtering
- High/Low absolute alarming
- Bad point alarming

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