

# Signal Conditioning Selection Guide

Designed to protect valuable measurement, control signals and equipment

## DESCRIPTION

Cynergy3 offers a variety of isolating signal conditioners which convert a measured signal such as temperature or AC/DC volts, current, frequency, pulse counters and strain gauges into an industry standard signal.

## Product Selection Guide

|                             | Loop Powered420 SERIES | ISOLATING SIGNAL CONVERTERS |          |       |           | ISOLATING SIGNAL CONVERTERS |      |        |         | TRIP AMPLIFIERS & IN-HEAD TXs |           |           |         | INTELLIGENT PRODUCTS |            |          |         | POWER SUPPLIES |
|-----------------------------|------------------------|-----------------------------|----------|-------|-----------|-----------------------------|------|--------|---------|-------------------------------|-----------|-----------|---------|----------------------|------------|----------|---------|----------------|
|                             |                        | ISOCON-6                    | ISOCON-3 | TC-TC | DAULCON-6 | DUALCON-3                   | VCON | STRAIN | SLIMCON | 20-ALIM                       | 2002-ALIM | 4002-ALIM | TC-HEAD | E-100 GATEWAY        | ISOSLICE/O | MATHSCON | FREQCON |                |
| <b>INPUTS</b>               |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      |            |          |         |                |
| dc voltage                  | ☆                      | ☆                           | ☆        |       | ☆         | ☆                           | ☆    |        | ☆       |                               | ☆         | ☆         |         | ☆                    | ☆          | ②        |         | ☆              |
| ac voltage                  |                        |                             |          |       |           |                             | ☆    |        |         |                               | ☆         | ☆         |         |                      | ☆          |          |         | ☆              |
| dc current                  | ☆                      | ☆                           | ☆        |       | ☆         | ☆                           | ☆    |        | ☆       | ☆                             | ☆         |           |         | ☆                    | ☆          | ②        |         |                |
| ac current                  |                        |                             |          |       |           |                             | ☆    |        |         |                               |           |           |         |                      | ☆          |          |         |                |
| Potentiometer               |                        | ☆                           | ☆        |       | ☆         | ☆                           |      |        |         |                               |           |           |         |                      | ☆          | ①        |         |                |
| Strain gauge                |                        |                             |          |       |           |                             | ☆    | ☆      |         |                               |           |           |         |                      | ☆          |          |         |                |
| Thermocouple/mV             | ☆                      | ☆                           | ☆        | ☆     | ☆         | ☆                           |      |        |         |                               | ☆         | ☆         | ☆       |                      | ☆          | ①        |         |                |
| RTD                         | ☆                      | ☆                           | ☆        |       | ☆         | ☆                           |      |        |         |                               | ☆         | ☆         |         | ☆                    | ☆          | ①        |         |                |
| Frequency                   |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      | ☆          |          | ☆       |                |
| Multiple I/O                |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      | ☆          | ②        |         |                |
| <b>OUTPUTS</b>              |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      |            |          |         |                |
| dc voltage                  | ☆                      | ☆                           | ☆        |       | ②         | ②                           | ☆    | ☆      | ☆       |                               |           | ☆         |         | ☆                    | ☆          | ☆        | ☆       | ☆              |
| dc current source           | ☆                      | ☆                           | ☆        |       | ②         | ②                           | ☆    | ☆      | ☆       |                               |           | ☆         |         | ☆                    | ☆          | ☆        | ☆       |                |
| dc current sink             | ☆                      | ☆                           | ☆        |       | ②         | ②                           | ☆    |        | ☆       |                               |           |           | ☆       |                      |            |          |         |                |
| mV Output                   |                        | ☆                           | ☆        | ☆     | ②         | ②                           | ☆    |        | ☆       |                               |           | ☆         |         |                      |            |          |         |                |
| Dual outputs                |                        |                             |          |       | ☆         | ☆                           |      |        |         |                               |           |           | ☆       | ☆                    |            |          |         |                |
| Relay contacts              |                        |                             |          |       |           |                             |      |        |         | ①                             | ②         | ②         |         |                      | ☆          |          |         |                |
| Frequency                   |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      | ☆          |          |         |                |
| <b>FEATURES AND OPTIONS</b> |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      |            |          |         |                |
| Loop powered                | ☆                      |                             |          |       |           |                             |      |        |         | ☆                             |           |           | ☆       |                      |            |          |         |                |
| dc powered                  |                        | ☆                           |          | ☆     | ☆         |                             | ☆    | ☆      | ☆       |                               | ☆         | ☆         |         | ☆                    | ☆          | ☆        | ☆       | ☆              |
| ac powered                  |                        |                             | ☆        | ☆     |           | ☆                           |      | ☆      |         |                               |           | ☆         |         |                      |            |          |         | ☆              |
| Isolated I/O                | ☆                      | ☆                           | ☆        | ☆     | ☆         | ☆                           | ☆    | ☆      | ☆       | ☆                             | ☆         | ☆         | ☆       | ☆                    | ☆          | ☆        | ☆       | ☆              |
| User-Configurable           | ☆                      | ☆                           | ☆        | ☆     | ☆         | ☆                           | ☆    | ☆      | ☆       | ☆                             | ☆         | ☆         | ☆       | ☆                    | ☆          | ☆        | ☆       | ☆              |
| PC Configurable             |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      | ☆          |          |         |                |
| Square-Root Extract         |                        | ☆                           | ☆        |       | ☆         | ☆                           |      |        |         |                               |           | ☆         |         |                      |            | ☆        | ☆       |                |
| T/C Linearisation           |                        | ☆                           | ☆        | ☆     | ☆         | ☆                           |      |        |         |                               |           | ☆         |         |                      | ☆          |          |         |                |
| RTD Linearisation           |                        | ☆                           | ☆        |       | ☆         | ☆                           |      |        |         |                               | ☆         | ☆         |         |                      | ☆          |          |         |                |
| Custom Linearisation        |                        | ☆                           | ☆        |       | ☆         | ☆                           |      |        |         |                               |           |           |         |                      | ☆          |          |         |                |
| Full Maths/Logic            |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      | ☆          | ☆        |         |                |
| LED Display                 |                        |                             |          |       |           |                             |      |        |         |                               |           | ☆         |         | ☆                    |            |          |         |                |
| Tx Supply Option            |                        | ☆                           | ☆        | ☆     | ☆         | ☆                           | ☆    | ☆      |         |                               |           | ☆         |         |                      | ☆          |          |         | ☆              |
| Integration                 |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      | ☆          |          |         |                |
| Intelligent Trip            |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      | ☆          |          |         |                |
| RS232/485 Ethernet          |                        |                             |          |       |           |                             |      |        |         |                               |           | ☆         |         |                      | ☆          |          |         |                |
| PID / Timers                |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      | ☆          |          |         |                |
| Steam Tables                |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      | ☆          |          |         |                |
| Flow Computing              |                        |                             |          |       |           |                             |      |        |         |                               |           |           |         |                      | ☆          |          |         |                |
| True RMS                    |                        |                             |          |       |           |                             | ☆    |        |         |                               |           |           |         |                      |            |          |         |                |
| OEM Solution                | ☆                      | ☆                           | ☆        | ☆     | ☆         | ☆                           | ☆    | ☆      | ☆       | ☆                             | ☆         | ☆         | ☆       | ☆                    | ☆          | ☆        | ☆       | ☆              |