

## FLEXIBLE INPUTS, ADDITIONAL OUTPUTS, OPTIONAL CAN NODE, HIGH-ACCURACY, HIGH VOLTAGE SUPPORT

The FlexiMonitor is a multipurpose additional and optional CAN Node for Eltek Smartpack2 and Smartpack S based control systems. FlexiMonitor adds many advanced features like high-accuracy current measurements, symmetry and voltage measurements down to battery cell level, high voltage fuse sensing, more control/alarm outputs and additional temperature measurements and more to your Smartpack2 based control system.



# FLEXIMONITOR

## MULTIPURPOSE CAN NODE FOR ELTEK CONTROLLERS

Doc 242100.603.DS3 – v5

### APPLICATIONS

#### TELECOM – MOBILE / WIRELESS / FIXED

- RADIO BASE STATIONS
- CELL SITES
- MICROWAVE

#### OFFSHORE AND PROCESS INDUSTRY

- SAFETY AND AUTOMATION SYSTEMS (SAS)

#### RAILWAY INFRASTRUCTURE

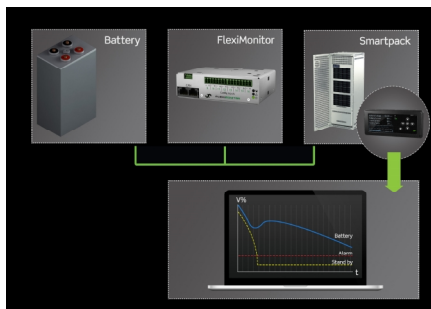
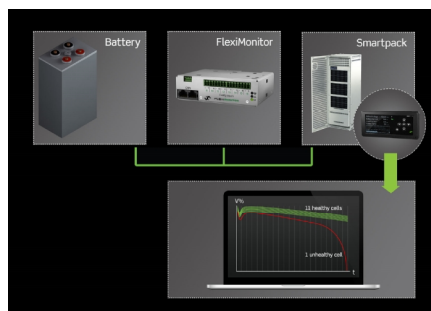
- CONTROL & PROTECTION
- SIGNALING

#### POWER UTILITIES

- CONTROL & PROTECTION

#### DATA CENTER

- BATTERY MONITORING



CELL VOLTAGE AND TEMPERATURE MONITORING

### KEY FEATURES

- HIGH ACCURACY INPUTS FOR RECTIFIER, LOAD AND BATTERY CURRENT MEASUREMENTS
- INPUTS FOR TEMPERATURE PROBES
- VOLTAGE & SYMMETRY MEASUREMENTS ON BATTERY BANKS (WIDE RANGE 2V – 220V)
- HV & LV FUSE SENSE INPUTS
- PROGRAMMABLE DIGITAL INPUTS FOR ALARMING AND EVENT CONTROL
- SENSING OF 4-20MA SIGNALING
- TACHO (PULSE SENSE) INPUTS
- UP TO 14 UNITS CAN BE USED IN PARALLEL IN A CONTROL SYSTEM (TOTAL: 224 INPUTS)

# FLEXIMONITOR

## MULTIPURPOSE CAN NODE FOR ELTEK CONTROLLERS

| Model        | CAN node        |
|--------------|-----------------|
| FlexiMonitor | 242100.603/.607 |

### INPUT DATA

|                      |                    |
|----------------------|--------------------|
| Quantity             | 16 multipurpose    |
| Voltage range (.603) | -280 Vdc to 280Vdc |
| Voltage range (.607) | 0 Vdc to 280Vdc    |
| Current shunt range  | -100mV to 100 mV   |
| Temperature range    | -20 to +70°C       |

### OUTPUT DATA

|                                       |            |
|---------------------------------------|------------|
| Quantity                              | 16         |
| Relay outputs (with relay extension)  | 4 or 8     |
| Voltage rating (with relay extension) | 0-220 Vdc  |
| Current rating (with relay extension) | 0,02-8,0 A |

### OTHER SPECIFICATIONS

|                    |                    |
|--------------------|--------------------|
| Dimensions (LxWxH) | 115 x 84 x 33,6 mm |
|--------------------|--------------------|

| Model                 | CAN Node   |
|-----------------------|------------|
| Relay extension board | 242100.604 |

### OUTPUT DATA

|                     |                    |
|---------------------|--------------------|
| Quantity            | 8                  |
| Voltage rating      | 0-220Vdc, 0-240Vac |
| Current Rating      | 30V-2A             |
| Current derating to | 220V-0,02A         |

### OTHER SPECIFICATIONS

|                                    |                |
|------------------------------------|----------------|
| Dimensions (LxWxH) incl. FlexiMon. | 115x84x56,5 mm |
|------------------------------------|----------------|

| Model                 | CAN Node   |
|-----------------------|------------|
| Relay extension board | 242100.605 |

### OUTPUT DATA

|                     |                    |
|---------------------|--------------------|
| Quantity            | 4                  |
| Voltage rating      | 0-220Vdc, 0-240Vac |
| Current Rating      | 30V-8A             |
| Current derating to | 220V-0,1A          |

### OTHER SPECIFICATIONS

|                                    |                |
|------------------------------------|----------------|
| Dimensions (LxWxH) incl. FlexiMon. | 115x84x56,5 mm |
|------------------------------------|----------------|

| Model                  | CAN node   |
|------------------------|------------|
| FlexiMonitor LED panel | 242100.606 |

### OUTPUT DATA

|                               |                          |
|-------------------------------|--------------------------|
| 4 x Configurable push buttons | NO                       |
| 16 x Configurable LED lamps   | Red, Green, Blue, Yellow |
| Text templates                | Customized               |
| LED test                      | Push button              |

### OTHER SPECIFICATIONS

|                                    |                  |
|------------------------------------|------------------|
| Dimensions (LxWxH) incl. FlexiMon. | 205 x 94 x 50 mm |
|------------------------------------|------------------|

Specifications are subject to change without notice

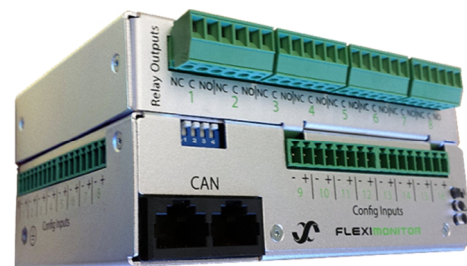
### FLEXIMONITOR



### RELAY EXTENSION BOARD WITH 4 OUTPUTS



### RELAY EXTENSION BOARD WITH 8 OUTPUTS



### FLEXIMONITOR LED PANEL



## MULTIPURPOSE CAN NODE FOR ELTEK CONTROLLERS

| TECHNICAL SPECIFICATIONS                      |                                                                                                                                  |                                                        |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Model                                         | FlexiMonitor                                                                                                                     |                                                        |
| Part number                                   | 242100.603                                                                                                                       | 242100.607                                             |
| INPUTS                                        |                                                                                                                                  |                                                        |
| Quantity                                      | 16 per FlexiMonitor (up to 14 units in parallel in one control system)                                                           |                                                        |
|                                               | Any input is configured in SW to act as voltage/symmetry, current shunt, fuse sense, temperature probe or tach/pulse sense input |                                                        |
| Voltage Range                                 | -280V <sub>DC</sub> to +280V <sub>DC</sub>                                                                                       | 0V <sub>DC</sub> to +280V <sub>DC</sub>                |
| Voltage Resolution                            | 10mV <sub>DC</sub>                                                                                                               | 10mV <sub>DC</sub>                                     |
| Current Shunt Range                           | -100mV to 100mV                                                                                                                  |                                                        |
| Current Shunt Resolution                      | 4.0μV <sub>DC</sub>                                                                                                              |                                                        |
| Example: 200A – 60mV                          | 13mA <sub>DC</sub>                                                                                                               |                                                        |
| Temperature Range                             | -20 to +70°C                                                                                                                     | -20 to +70°C                                           |
| Temperature Accuracy                          | ±6°C (0 to +40°C)<br>±8°C (-20 to 0°C and +40 to 70°C)<br>(not recommended for battery management)                               | ±2°C (0 to +40°C)<br>±4°C (-20 to 0°C and +40 to 70°C) |
| (Based on 470kΩ NTC probe)                    |                                                                                                                                  |                                                        |
| Tacho (pulse sense) Range                     | 100 to 11000 ppm                                                                                                                 |                                                        |
| OUTPUTS                                       |                                                                                                                                  |                                                        |
| Quantity                                      | 16 per FlexiMonitor (up to 14 units in parallel in one control system)                                                           |                                                        |
| Connection                                    | Ribbon cable terminals or plug-in relay extension boards                                                                         |                                                        |
| Maximum rating                                | 10mA                                                                                                                             |                                                        |
| RELAY EXTENSION BOARDS                        |                                                                                                                                  |                                                        |
| Part number                                   | 242100.604                                                                                                                       | 242100.605                                             |
| Quantity                                      | 8                                                                                                                                | 4                                                      |
| Voltage Rating                                | 0-220V <sub>DC</sub> (0-240V <sub>AC</sub> )                                                                                     | 0-220V <sub>DC</sub> (0-240V <sub>AC</sub> )           |
| Current Rating                                | 30V–2A derating to 220V–0.02A                                                                                                    | 30V-8A derating to 220V-0.1A                           |
| LED EXTENSION BOARD                           |                                                                                                                                  |                                                        |
| Part number                                   | 242100.606                                                                                                                       |                                                        |
| LED Lamps, quantity, type                     | 1x Power ON lamp and 16x configurable, colour: Red, Green, Blue, Yellow                                                          |                                                        |
| Push Buttons, quantity, type                  | 1x Lamp Test push button and 4x configurable, type NO                                                                            |                                                        |
| Text Templates                                | Customizable                                                                                                                     |                                                        |
| MOUNTING                                      |                                                                                                                                  |                                                        |
| DIN Rail clips                                | Part number: 282523                                                                                                              |                                                        |
| Screw Hole (M4) clips                         | Part number: 282524 (vertical) or<br>Part number: 315068 (horizontal)                                                            |                                                        |
| GENERAL SPECIFICATIONS                        |                                                                                                                                  |                                                        |
| Dimensions (LxWxH)                            | 115 x 84 x 33.6 mm (4.53 x 3.31 x 1.32")                                                                                         |                                                        |
| Dimensions (LxWxH) with relay extension board | 115 x 84 x 56.5 mm (4.53 x 3.31 x 2.22")                                                                                         |                                                        |
| Dimensions (LxWxH) with LED extension board   | 205 x 94 x 50 mm (8.07 x 3.7 x 1.97")                                                                                            |                                                        |
| Casing material                               | Aluminum alloy                                                                                                                   |                                                        |
| CAN Power consumption                         | Max. 200mA                                                                                                                       |                                                        |
| Temperature Range                             | Operating -20 to +70°C (-4 to 158°F)                                                                                             |                                                        |
| DESIGN STANDARDS                              |                                                                                                                                  |                                                        |
| Electrical safety                             | UL 60950-1, EN 60950-1                                                                                                           |                                                        |
| EMC                                           | ETSI EN 300 386 V.1.4.1<br>EN 61000-6-1 / -2 / -3 / -4<br>FCC Part 15 Subpart 109                                                |                                                        |
| Environment                                   | ETSI EN 300 019: 2-1 (Class 1.2), 2-2 (Class 2.3) & 2-3 (Class 3.2)<br>RoHS (2011/65/EU) and WEEE (2002/96/EC) compliant         |                                                        |