INTECH Micro
2100-ME.

CE   ISO9001 REGISTERED MANUFACTURER   TECHNOLOGY & QUALITY AWARD   Z985

Features.

- **2100-ME-32 :32768 Data Samples Time & Date Stamped.**
- **Each Sample Contains:**
  - **- 16 Analogue Inputs;**
  - **- Ambient Temperature;**
  - **- Value of Analogue Outputs;**
  - **- States of Digital Outputs;**
  - **- States of Digital Inputs;**
- **Rolling Buffer (First In First Out).**
- **Samples Stored in Permanent Flash Memory.**
- **Time and Date Retained for 2 Weeks Without Power.**
- **Memory Sample Rates Selectable:**
  5sec, 30sec, 1min, 2min, 5min, 10min, 15min, 30min, 1hour.
- **Scada Software Includes Memory Viewer Program.**
  - **Uploads and Displays Memory Data Via it's Own History Window.**
  - **When Upload Requested, Previous Samples are Checked so Only the Samples Since the Last Upload Are Read From the Station.**
  - **2100-ME Time and Date Easily Set to Host PC Time and Date.**
- **Easily Fitted Internally to 2100-A16 Rev1 RTU-32 or 2100-A16 Rev1.2.**

2100 models include:
2100-4S : RS422 to RS485 Converter.
2100-A16 : 16AI, 4DI, 2 Relay Out, 2 AO.
2100-A4 : 4AI, 4DI, 4 Relay Out, 2 AO.
2100-A4e : 4AI, 4DI, 8 Relay Out, 2 AO.
2100-AO : 8 AO, 8 AI, 12 DI, 2 Relay Out.
2100-D : 12DI, 12 Relay Out.
2100-IS : Isolated RS232 to RS422/485.
2100-M : 16AI Multiplexer.
2100-ME : Memory Expansion for 2100-A.
2100-NET : Isolated Ethernet to RS232/422/485.
2100-NS : Non-Isolated RS232 to RS422/485.
2100-R : 16 Relay Expansion for 2100-A.
2100-RL2 : 2 Relay Expansion for 2100-A.

Ordering Information.

2100-ME-32   32768 Data Samples

Description.

The 2100-ME is designed to be easily fitted to the 2100-A16. With the universal analogue inputs, as well as the DI, DO, & AO, of the 2100-A16 many different parameters can be stored for later uploading. For example if the 2100-ME-32 takes one sample every 4 minutes, 90 days of information can be stored. The memory board, together with the 10~28Vdc P/S option of the 2100-A16, make for an ideal remote datalogging package. Information can be easily uploaded via the standard Scada Comms.

Notes.

1/ Only fit 2100-ME-32 to 2100-A16 <u>Rev.1 RTU-32</u> or 2100-A16 Rev1.2.
2/ The clock of the 2100-ME is operated by a supercap. The clock will be retained for typically 2 weeks with no power. When the power is re-applied the super-cap recharges itself.
3/ Sample transfer rate of the flash memory is more than 300 samples/minute at 9600baud. The 2100-ME-32 takes approx. 104 minutes to upload.
4/ When samples are taken, only the spot values at that time are stored.
5/ The 2100-ME can be used when the PLC retransmission modes and Scada COMMS are operating. However, either the Scada must be stopped to read the samples out of the memory, or a seperate port must be used.
6/ The 2100-R cannot be used when the 2100-ME is installed.
7/ 2100-M values are not stored. The 2100-M driver does not operate with the 2100-ME installed.
8/ The 2100-ME cannot be used with RS485 Comms.
9/ The 2100-ME cannot be used with the Modbus RTU Protocol.

Quality Assurance Programme.

The modern technology and strict procedures of the ISO9001 Quality Assurance Programme applied during design, development, production and final inspection grant long term reliability of the instrument. This instrument has been designed and built to comply with EMC and Safety Standards requirements.

2100-A16 Memory Expansion - Using 2100-ME Memory Expansion Card.

The 2100-ME Memory Expansion Card is designed to allow the 2100A16 to stand alone, retaining the data collected for intermittent download. Data is held in permanent memory.
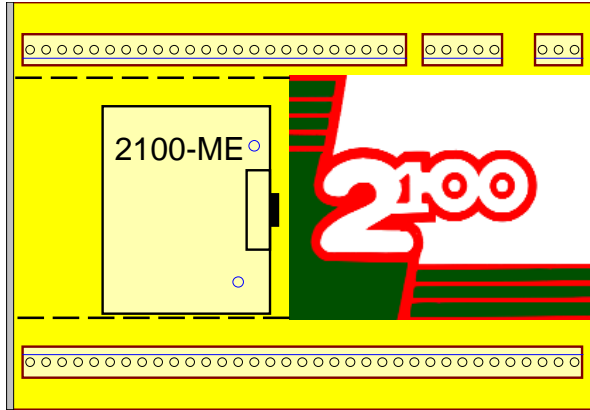
Connecting the 2100-A16 to the 2100-ME.

All power and signals must be de-energised before connecting any wiring, or altering any Jumpers or Dip Switches.

1/ Power must be off before installing the 2100-ME.
2/ Remove the cover off the 2100-A16. Refer below.
3/ Use antistatic precautions when installing the 2100-ME. Carefully orientate the 2100-ME board as shown above. Locate the two plastic stand-offs over the corresponding holes in the 2100-A16, and the 10 pin connector. Once all three are aligned, push the 2100-ME firmly into the 2100-A16.
4/ Install a link in position 4 of the 2100-A16 S1 Function jumper.
5/ Replace the 2100-A16 cover. Refer Below.
6/ The 2100-ME-32 can only be fitted to a 2100-A16 <u>Rev.1 RTU-32</u> or 2100-A16 Rev1.2.

⚠ **CAUTION:** **Dangerous Voltages may be present. The 2100-A16 has no user serviceable parts.** ⚡
Protective enclosure only to be opened by qualified personnel.
Remove ALL power sources before removing protective cover.

2100-A16 Cover Removal and Fitting.

To remove 2100 covers, firmly push down the button in the middle of one endplate, and pull the end plate outwards, while pulling the cover up and out.

To fit the cover, first make sure the cover is being fitted the correct way around, (Terminal 82 on the cover is above 82 on the board.) and that the serial number on the board matches the serial number on the cover (if applicable). Slide one end of the cover into the slot in the endplate. Pull the other endplate outwards and push the cover down until it slides into the slot of this endplate. Check both ends are firmly held.

2100-ME-32 Specifications.

EMC Emissions Compliance	EN 55022-A.
EMC Immunity Compliance	EN 50082-1.
RF Immunity	<±1% Effect FSO Typical.
Operating Temperature	0~60C.
Storage Temperature	-20~80C.
Operating Humidity	5~85%RH Max. Non-Condensing.