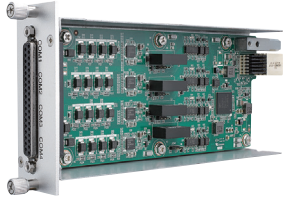


ITA-EM Modules

ITA-EM-SR6 1

4-Port RS-232/422/485 Serial Port Module



The ITA-EM-SR61 serial module is compatible with ITA-5831 series systems and supports flexible configuration.

Features

- 4 x RS-232/422/485 software-selectable serial ports
- Up to 921.6 kbps transmission speed
- 256-byte FIFOs and automatic flow control
- 2500 V_{DC} isolation protection
- Compliant with EN50121-4 standards for railway applications

Specifications

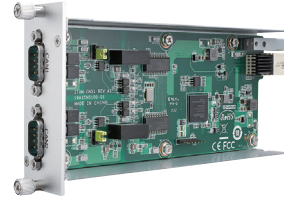
| | | |
|------------------------------|------------------------|--|
| General | Bus Interface | PCI Express x1 link, Gen1 compliant |
| | Connectors | DSUB_37(F)H DSUB37P |
| | Ports | 4 |
| | Power Consumption | 3.3V @ 1.9A (typical) |
| Communications | Serial Port Controller | XR17 V354 |
| | Data Bits | 5,6,7,8 |
| | Data Signals | RS232: DCD,DSR, RXD, TXD, RTS, CTS, DTR, RI, GND RS422:DCD, RXD,TXD, DTR RS485: DCD, RXD |
| | FIFO | 256 bytes |
| | Flow Control | RTS |
| | Parity | None, even, odd |
| | Speed | Up to 921.6 Kbps |
| | Stop Bits | 1,1.5,2 |
| Protection | ESD | Air ±15KV, contact ± 8KV |
| | Surge | L-L 1k, L-G 2K. |
| | Isolation | 2,500 V _{DC} |
| Mechanical and Environmental | Operating Temperature | -25 ~ 70 °C |
| | Storage Temperature | -40 ~ 85 °C |
| | Dimensions (L x W x D) | 195 x 26 x 87 mm |

Ordering Information

| Part Number | Description |
|-------------------|--|
| ITA-EM-SR51-00A1E | ITA-5231_ITA-EM-SR51-00A1E, 4 x COM port |

ITA-EM-CN6 1

Dual CAN Module



The ITA-EM-CN61 CAN module is compatible with ITA-5831 series systems.

Features

- 2 x CAN ports with DB9 type
- Up to 1Mbps CAN transmission speed
- 1500 V_{DC} isolation protection
- Compliant with EN50121-4 standards for railway applications

Specifications

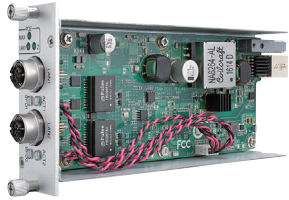
| | | |
|------------------------------|------------------------|--|
| General | Bus Interface | PCI Express x1 link, Gen2 compliant |
| | Connectors | 2 x CAN |
| | Ports | 2 |
| Communications | Power Consumption | 3.3V @ 0.9A, 5V @ 600mA, 1.2V @ 1.5A (typical) |
| | CAN Controller | SN65HVD251DR |
| Protection | CAN Speed | 1 Mbps |
| | ESD | Air ± 15KV, contact ± 8KV |
| | Surge | L-L ±2KV, L-G ±4KV |
| Mechanical and Environmental | Isolation | 1,500 V _{DC} |
| | Operating Temperature | -25 ~ 70 °C |
| | Storage Temperature | -40 ~ 85 °C |
| | Dimensions (L x W x D) | 195 x 26 x 87 mm |

Ordering Information

| Part Number | Description |
|-------------------|--|
| ITA-EM-CN51-00A1E | ITA-5231_ITA-EM-CN51-00A1E, 2 x CAN port |

ITA-EM-NC61

2-Port M12 GbE Module



The ITA-EM-NC61 LAN module is compatible with ITA-5831 series systems.

Features

- 2 x 10/100/1000 Mbps M12 X-coded(F) ports
- Embedded Intel® I210-IT GbE controller
- 1500 V_{DC} isolation protection
- Compliant with EN50121-4 standards for railway applications

Specifications

| | | |
|------------------------------|------------------------|-------------------------------------|
| General | Bus Interface | PCI Express x1 link, Gen2 compliant |
| | Connectors | M12 X-coded(F) |
| | Ports | 2 |
| | Power Consumption | 12V @ 300mA (typical) |
| Communications | CAN Controller | 2 x Intel® I210-IT |
| Protection | ESD | Air ±8KV, contact ± 6KV |
| | Surge | L-L 2KV, L-G 4KV. |
| | Isolation | 1,500 V _{DC} |
| Mechanical and Environmental | Operating Temperature | -25 ~ 70 °C |
| | Storage Temperature | -40 ~ 85 °C |
| | Dimensions (L x W x D) | 195 x 26 x 87 mm |

Ordering Information

| Part Number | Description |
|-------------------|--|
| ITA-EM-NC61-00A1E | ITA-5831_ITA-EM-NC61, 2 xGiga LAN(M12 X-coded) |

ITA-EM-PE61

2-Port M12 GbE with POE Module



The ITA-EM-PE61 POE module is compatible with ITA-5831 series systems.

Features

- 2 x 10/100/1000 Mbps M12 X-coded(F) ports with POE
- Embedded Intel® I210-IT GbE controller
- 1500 V_{DC} isolation protection
- Compliant with EN50121-4 standards for railway applications

Specifications

| | | |
|------------------------------|------------------------|-------------------------------------|
| General | Bus Interface | PCI Express x1 link, Gen2 compliant |
| | Connectors | M12 X-coded(F) |
| | Ports | 2 |
| | PSE | 2 |
| Communications | Ethernet Controller | 2 x Intel® I210-IT |
| | PSE Controller | MICROSEMI_PD69104B1FILQ |
| Protection | ESD | Air ±8KV, contact ± 6KV |
| | Surge | L-L 2KV, L-G 4KV. |
| | Isolation | 1,500 V _{DC} |
| Mechanical and Environmental | Operating Temperature | -25 ~ 70 °C |
| | Storage Temperature | -40 ~ 85 °C |
| | Dimensions (L x W x D) | 195 x 26 x 87 mm |

Ordering Information

| Part Number | Description |
|-------------------|--|
| ITA-EM-PE61-00A1E | ITA-5831_ITA-EM-PE61-00A1E, PoE with M12 |

ITA-EM-BA61

Battery Module



The ITA-EM-BA61 Battery module is compatible with ITA-5831 series systems.

Features

- Battery Capacity 2500mAh
- 40mins discharging duration under 55°C
- Fast charging time
- Compliant with UL 2054, IEC 62133, UN 38.3, CQC (GB 31241) standards

Specifications

| | | |
|----------------------------------|----------------------------|-----------------------|
| General | Bus Interface | SMBus |
| | Nominal Capacity | 2500mAh |
| | Discharging Current (Max.) | 3.3V @ 1.9A (typical) |
| Performance | Charging Temperature | 0 ~ 40 °C for 3 hrs |
| | Discharging Temperature | 0 ~ 55 °C for 40mins |
| Storage Temperature For Shipment | Less than 1 month | -20 ~ 50 °C |
| | Less than 3 month | -20 ~ 40 °C |
| | Less than 1 year | -20 ~ 20 °C |
| Mechanical | Dimensions (L x W x D) | 195 x 26 x 87 mm |
| Life cycle | | 500 cycles or 1 year |

Ordering Information

| Part Number | Description |
|-------------------|--|
| ITA-EM-BA61-00A1E | ITA-5831_ITA-EM-BA61, 14.4V 2500 mAh Panasonic |