

## IFE-C700A:

Industrial 10/100Base-TX to 100Base-FX FE Media Converter with LFP Wide Temperate

## Key Features

- One port 10/100 TX to 100 FX media converter
- Choice of SC, ST or LC connector for multimode and single mode
- Supports packet length up to 2046 bytes
- Supports 9K jumbo packets
- LFP (Link Fault Pass-through) far-end fault detection technology
- Power failure, port break alarm by relay output
- Power redundancy with wide range input, DC24V (12~48V)
- Reverse power polarity protection
- IP-30 grade protection case
- $-40^{\circ} \mathrm{C} \sim 75^{\circ} \mathrm{C}$ wide operating temperature for hazardous environment applications - RoHS Compliance


## Overview

IFE-C700A is a 1-port media converter qualified for extended distance transmission under harsh environment. For the easy maintenance and time-saving, IFE-C700A features remote Link Fault Pass Through technology which provides remote link down signal forwarding, acknowledging link events occurred on each end of IFE-C700A to main server. To activate forwarding mode and LFP functions, simply adjust DIP switch then reset the converter, the reconfigurations will be applied. Single-mode and Multi-mode fiber optical ports meet your needs for long distance transmission up to 100 Km.
When you are ready to install IFE-C700A, you will find out that it can be easily wall mounted and be mounted directly on DIN rail. IFE-C700A has two DC24V inputs, and it is also compatible with range from DC12V~48V. Dual power inputs and built-in reverse polarity protection are designed as the redundant power system to ensure your power on each end of IFE-C700A to main server. With IP 30 rigid aluminum case,

## Technical Specifications

- Standard Compliance:
---IEEE802.3 10BASE-T
---IEEE802.3u 100BASE-TX/100BASE-FX
---IEEE802.3x Flow Control and Back pressure


## - Data Transfer Rate

---100Mbps:148,800 pps
---10Mbps:14,880 pps

- Buffer Memory: 228K
- Connector
---RJ-45: 10/100Mbps (Auto-negotiation)
---ST/SC/LC: 100Mbps
- Cable
---TP: Cat. 5 (Support distance up to 100m)
---Fiber (M-M):50/125,2.5/125,100/140 $\mu \mathrm{m}$
---Fiber (S-M):8.3/125,8.7/125,9/125,100/125 $\mu \mathrm{m}$
(Support distance up to 100 Km )
- Flow Control
---IEEE802.3x compliant forfull-duplex
---Backpressure flow control for half-duplex
- LED Description

| LED | Color | Function |
| :--- | :--- | :--- |
| 100FX- <br> LNK/ACT | Green | Lit when fiber connection is good |
|  |  | Blink when fiber data is present |
| TX LNK/ACT | Green | Lit when TP connection is good |
|  |  | Blink when TP data is receiving |
| TX 100 | Yellow | Lit when TP speed is 100Mbps |
|  | Off when TP speed is 10Mbps |  |
| PWA | Green | Lit when powerPWA is coming up |
| PWB | Green | Lit when power PWB is coming up |
| PWR | Green | Lit when DC JACK, PWA, PWB <br> power is coming up |

- DIP Switch Function

| Switch | Description |
| :--- | :--- |
| Fiber FDX/HDX | Fiber port 100 FDX or 100 HDX |
| Jumbo ON/ OFF | Enable/ Disable jumbo frame |
| LFP ON / OFF | Link Fault Pass through Enabled or Disabled |
| TP-100 / 10 | 100 Mbps or 10Mbps when TP at Force |
| TP-FDX/HDX | Full Duplex or Half Duplex when TP at Force |
| TP-Auto / Force | TP port at Auto-nego mode or Force mode |
| Alarm ON/OFF | Alarm port Enable/Disable |

*Alarm Relay contactactive support portlink down or power failure

CE/FCC regulatory approvals, and 3-year global warranty, IFE-C700A series are your reliable choices for hazardous applications.

- Network Interface:

| Category | Connector | Transmission | Max. Cable Length | Wavelength |
| :---: | :---: | :---: | :---: | :---: |
| 10-T/100-TX | RJ-45 | Full/Half Duplex | 100M |  |
| $\begin{aligned} & \text { 100-FX } \\ & (\mathrm{M}-\mathrm{M}) \end{aligned}$ | SC/ST | Full/Half Duplex | $\begin{gathered} \hline 2 \mathrm{Km} \\ 50 / 125 \mu \mathrm{~m} \\ \hline \end{gathered}$ | 1310 nm |
| $\begin{aligned} & 100-\mathrm{FX} \\ & \text { (S-M) } \end{aligned}$ | SC | Full/Half Duplex | 5/20/60/ 100 Km $9 / 125 \mu \mathrm{~m}$ | 1310 nm |
| $\begin{array}{\|l} \hline 100-\mathrm{FX} \\ \text { (S-M) } \end{array}$ | Bidi-SC | Full/Half Duplex | $\begin{aligned} & 20 \mathrm{Km} \\ & 9 / 125 \mu \mathrm{~m} \\ & \hline \end{aligned}$ | $\begin{aligned} & 1310 \mathrm{~nm} \\ & 1550 \mathrm{~nm} \\ & \hline \end{aligned}$ |
| 100FX (S-M) | LC | Full/Half Duplex | 5/20/60/ 100 Km 9/125 $\mu \mathrm{m}$ | 1310 nm |

- Hardware Spec

| Feature | Detailed Description |
| :--- | :--- |
| Power Characteristics | Powersupply: 24VDC (12~48VDC) |
|  | Power consumption: 3.37 W |
| Ambient Temperature | $-40^{\circ} \mathrm{C} \sim 75^{\circ} \mathrm{C}$ |
| Humidity | $5 \%$ to $95 \%$ |
| Dimensions | $108(\mathrm{H}) \times 29.8(\mathrm{~W}) \times 98(\mathrm{D}) \mathrm{mm}$ |
| Weight | 0.44 kg |
| Installation | Din Rail, Wall mount, Desktop |
| EMI | CISPR 22:A1:2000+A2:2002 |
|  | ICES-003:2004,Class A |
|  | EN55022:Class A |
|  | EN61000-3-2:2000 |
|  | EN61000-3-3:1995+A1:2001 |
|  | EN55024 |
|  | IEC61000-4-2/3/4/5/6/8/11 |
| Shock | IEC60068-2-27 |
| Freefall | IEC60068-2-32 |
| Vibration | IEC60068-2-6 |
| Case | IP30 Protection |
| MTBF | 192000 hr |
| Warranty | 3 Years |

Packing Information

| Carton Dimensions (mm) | pcs/Carton | N.W (KG) | G.W (KG) |
| :---: | :---: | :---: | :---: |
| $602 \times 447 \times 348$ | 40 | 24.4 | 25.4 |

Order Information

| IFE-C700ASC | Industrial 10/100Base-TX to 100Base-FX FE <br> Media Converter withLFP Wide Temperate, <br> SC Multi-Mode |
| :--- | :--- |
| IFE-C700ABS3.S20 | Industrial 10/100Base-TX to 100Base-FX FE <br> Media Converter withLFP Wide Temperate, <br> Bidi SC Single-Mode 20km, 1310nm |
| IFE-C700ABS5.S20 | Industrial 10/100Base-TX to 100Base-FX FE <br> Media Converter withLFP Wide Temperate, <br> Bidi SC Single-Mode20km, 1550nm |

