RS Telesolutions INDUSTRIAL NETWORKING

RST-IMC-2S2T-BT90I

2-Port Gigabit SFP to 2-Port RJ45 Industrial PoE++ Media Converter

Gigabit fibre in. 90 W of PoE++ out. In a fanless DIN card.

Two Gigabit fibre links become two Gigabit copper ports — and both copper ports source IEEE 802.3bt Type-4 power, up to 90 W each and 180 W in total.

Most industrial fibre-to-copper converters stop at 30 W. When the device at the end of the fibre run is a heated PTZ camera, a multi-radio access point or an edge compute node, that means a converter, a separate injector and a second power feed in the cabinet. This unit replaces all three.

Unmanaged by design. Four DIP switches cover fibre redundancy, fibre speed, 250 m extended copper reach and the PoE watchdog. Nothing to configure, nothing to log into, nothing to patch.

Rated -40 °C to +75 °C in an IP40 anodised aluminium extrusion with no fan and no filter, with redundant DC inputs and a fault relay.

90 W	180 W	-40...+75 °C	8 Gbps
per port, 802.3bt Type-4	total PoE budget	fanless, IP40	non-blocking

Key features

- 2 × 100/1000Base-X SFP slots — vendor neutral, hot swappable, DDM pass-through
- 2 × 10/100/1000Base-T ports, auto-negotiation and auto MDI/MDI-X
- 802.3af / at / bt PSE on both copper ports, Class 1–8, 4-pair
- Store-and-forward, 8 Gbps non-blocking, 4 K MAC, 10 K jumbo frames
- Redundant 36–60 V DC inputs with bumpless changeover
- Form-A fault relay on power loss, PoE fault or over-temperature
- PoE watchdog auto-recovers an unresponsive powered device
- 250 m extended copper reach at 10 Mbps for long cable runs
- 35 mm DIN rail standard; wall-mount bracket optional

Applications

Intelligent transport and roadside cabinets · rail trackside and platforms · utility substations · outdoor Wi-Fi and small cells · ports, mining, oil and gas · campus and stadium distribution frames.

Specification summary

Fibre	2 × SFP, 100/1000Base-X, LC duplex, up to 550 m MM / 120 km SM
Copper	2 × 10/100/1000Base-T(X), shielded RJ45
PoE	802.3af/at/bt, 90 W per port, 180 W total, 4-pair
Switching	Store-and-forward, 8 Gbps, 4 K MAC, 10 K jumbo, 1 Mbit buffer
Flow control	IEEE 802.3x pause / back-pressure
Input	2 × redundant 36–60 V DC, ≤ 5 W without PoE
AC option	RST-PSU-240-54, 85–264 V AC to 54 V DC 240 W
Protections	Reverse polarity, OVP, UVLO, over-current, surge
Enclosure	Extruded aluminium, black anodised, IP40, fanless
Dimensions	55 × 150 × 105 mm body, 430 g
Temperature	-40 to +75 °C operating, 5–95 % RH
Compliance	CE, FCC Class A, EN 55032/55035, EN 62368-1, IEC 61000-4 suite, RoHS

Ordering

RST-IMC-2S2T-BT90I media converter, 90 W per port · **RST-IMC-2S2T-BT90I-R** EN 50121-4 railway variant · **RST-IMC-2S2T-BT90I-T** NEMA TS2 traffic variant

RST-PSU-240-54 companion AC-DC DIN supply · **RST-WMK-01** wall-mount kit · **RST-SFP-xx** transceivers, 550 m to 120 km, ordered separately