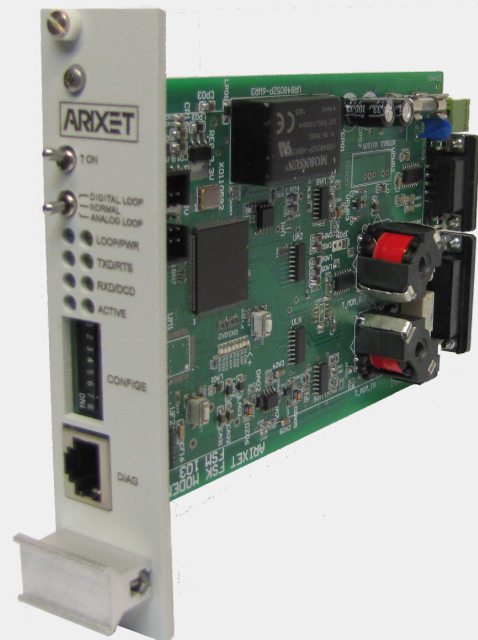


## FEATURES

- X FSK modem developed for SCADA utilities communication networks
- X Based on international ITU V.23 proprietary and Cegelec 1200/600Bd communication standards
- X Leased lines, Specialized Line, Fiber Optic, Power Line Carrier or Radio communication Networks
- X Full-duplex operating mode
- X Easy configurable by dip switches on panel and easy loop tests
- X Available in internal card (FSM 104) and external (FSM 204) Packages



# DESCRIPTION



ARIXET FSM104/204 is a frequency shift keyed (FSK) modem for asynchronous data transmission in 300-3400 Hz voice band. It is highly immune to interference , noise and dust and permits extensive voice-band communication link utilization.

The modem supports international standards ITU V.23 proprietary Cegelec 1200/600Bd communication standards. The modem can operate in full-duplex, point-to-point mode. ARIXET FSM104/204 FSK modem developed by advanced FPGA technology, thus offering high service flexibility through programmable features. Configuration is performed via dip switch set on the front panel even on offline mode.

# APPLICATION

ARIXET FSM104/204 is designed for use in SCADA systems mainly based upon power utility or other industrial communication networks. Depending on the communication network it can communicate through specialized, private or leased lines, radio links , fiber optic systems and power line carrier (PLC).

# MOUNTING TYPES

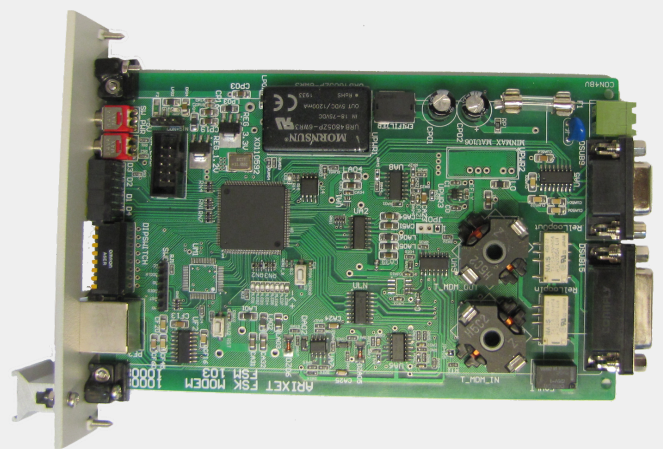
ARIXET FSM204 is available as desktop, Din-Rail and internal type.

Desktop and external types prepared with full aluminium enclosure , industrial features with anti shock and dust proof, and Din Rail mounting clip.

Internal card ARIXET FSM104 is compatible with DECODE shelf in two different types of standard 19" racks:

- X 1U rack with 1, 2 or 3 modems per rack
- X 3U rack with 10,12 or 14 modems per rack and additional blank front plates covering unused slots.

All connectors at the rear side are accessible at the back openings.



# TECHNICAL SPECIFICATIONS



<b>Operations</b>	<b>Type</b>	Data transmission on audio frequency analog medium using FSK technique
	<b>Media</b>	Leased line, Fiber Optic, Radio, PLC
	<b>Modes</b>	Asynchronous, Point-to-point, 4-wire

<b>Standards</b>	<b>FSK</b>	<b>Transmission Rate (Bd)</b>	<b>Frequency Deviation (Hz)</b>	<b>Channel spacing (bandwidth) Hz</b>	<b>-F (Hz)</b>	<b>F0 (Hz)</b>	<b>+F (Hz)</b>
	ITU V.23 /2	1200	± 400	1600	1300	1700	2100
	Cegelec 60x	600	±240	960	2520	2760	3000

<b>Interfaces</b>	<b>DTE interface</b>	<ul style="list-style-type: none"> <li>- ITU CCITT V.24 &amp; V.28 (EIA RS-232C), DB9 (female) connector</li> <li>- Character length: 5-9 data bits, 1 start, 1 stop</li> <li>- Option to switch on fail relay if DCD off</li> </ul>
	<b>Analog Line</b>	<ul style="list-style-type: none"> <li>- DB15 (female) connector;</li> <li>- 600Ω or high impedance with return loss &lt; 0.2;</li> <li>- Transmission level: +3dBV to -18dBV, programmable</li> </ul>
	<b>Power supply</b>	2-position screw plug type (for 2-2.5mm <sup>2</sup> wire) with reverse polarity protection

<b>General</b>	<b>LED indication</b>	PWR, TXD, RXD, RTS, DCD, ACTIVATION
	<b>Power supply</b>	18 - 60 VDC Reverse protected
	<b>Isolation</b>	Transformer up to 1500V
	<b>Immunity to noise</b>	<ul style="list-style-type: none"> <li>- Peak pulse noise: 100V Peak</li> <li>- Effective interference at 50 Hz: 80V rms</li> </ul>
	<b>Temperature</b>	Operation and storage: -10° to +50 °C
	<b>Dimensions</b>	<ul style="list-style-type: none"> <li>- External : Full aluminum enclosure 112x30x170mm (W*H*D)</li> <li>- Internal 19" rack mount : EUROCARD PCB, 160x100mm 3HE, 6T in 1U and 3U rack (DECODE Compatible)</li> </ul>