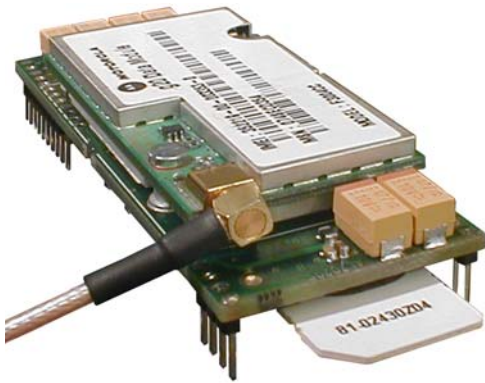


AL7020S GSM SOCKET MODEM



 Made in Switzerland

Benefits:

- Enables any device to send and receive data via dual band 900/1800 MHz GSM network.
- Complete, ready-to-integrate GSM and GPRS Class 8 Module.
- Get IP connectivity without wasting time and money.
- Pin compatible with AL4000, AL3000 and AL5000 (Analog and ISDN) series.
- Full type approved.

Functions:

- AT-Command Set Interface Protocol ETSI 07.07 and 07.05.
- ETSI GSM Phase 2+ standard.
- Dual Band EGSM900 / 1800 Mhz
- Class 4 (2W @ 900 MHz)
- Class 1 (1W @ 1800MHz)
- GPRS multislots classes up to Class 8
- GPRS Class B GSM
- GPRS max. BR 85.6 Kbps (CS4)
- CSD max BR 14.4 Kbps
- Short messages services features (GSM or GPRS mode). MO/MT text and PDU modes.
- Auto-Baud rate detection.
- Sleep modes

GSM Modem Modul with TCP/UDP and Multiplexing connectivity. Dual-band 900/1800MHz technology with GPRS Class B and multislots classes up to Class 8. Interchangeable with Analog and ISDN Modems.

Connectivity:

- Transparent, V.32bis and V.110 transmission protocols.
- Automatic fax group 3 (Class 1)
- Multiplexing protocol (ETSI 07.10) enables up to 4 virtual channels.
- TCP/IP, UDP Stack. Simultaneous use of TCP and UDP.
- Up to 4 simultaneous protocol connections.

Specifications:

- Compact Size: 64.5 X 26.5 X 10 mm.
- 3.3V or 5VDC Supply.
- Typical Power use average: 270mA
- Typical Power use @ PCL 8: 1A peak
- Serial ITU-T V.24 (EIA/TIA-232-E) TTL interface (3.3V / 5V levels).
- Fully Approved for EU (CE).
- Internal SIM card Reader
- Optional external SIM card reader
- Integrated MMCX Antenna Interface.
- Optional extended temperature range from -30° to +85°.
- 2 Year warranty.

Ordering: AL7020S

AL7020S-3V (3.3V version)

AL7020S-ES (External SIM)

AL7020S Pin Diagram:

| Pin Diagram | | Pin No | NAME | Pin No | NAME |
|-------------|----|--------|----------------------|---------|----------|
| 1 | NC | 1 | NC | 64 | SPEAKER |
| 2 | NC | 2 | NC | 63 | GND |
| | | 3..23 | NO PIN | 62 | MICRO IN |
| | | 24 | RESET | 61 | VCC |
| | | 25 | NC | 60 | NO PIN |
| | | 26 | GND | 59 | NO PIN |
| | | 27 | LED GPRS | 58 | NO PIN |
| | | 28 | SIMVCC <i>option</i> | 57 | NO PIN |
| | | 29 | GSM LED | 56 | NO PIN |
| | | 30 | SIMDATA <i>opt.</i> | 55 | NO PIN |
| | | 31 | SIMRST <i>option</i> | 54 | NO PIN |
| | | 32 | SIMCLK <i>option</i> | 45...53 | NO PIN |
| | | 33 | RTS# | 44 | NO PIN |
| | | 34 | RXD# | 43 | NO PIN |
| | | 35 | TXD# | 42 | NO PIN |
| | | 36 | RI# | 41 | GND |
| | | 37 | DSR# | 40 | DTR# |
| | | 38 | CTS# | 39 | DCD# |

AL7020S Operating Conditions:


| Parameter | Symbol | Limits | Units |
|-----------------------------------|----------------|------------------|-------|
| Supply Voltage | VDD | + 4.75 to + 5.25 | VDC |
| Supply Voltage (-3V Version) | VDD | + 3.20 to + 3.40 | VDC |
| Operating temperature | T _A | 0° to + 70° | °C |
| Extended temperature (ET Version) | T _A | -30° to + 85° | °C |

AL7020S Power Requirements:

| Mode | Typical Current (I _{typ}) (mA) | Max. Current (I _{max}) (mA) | Typical Power (P _{typ}) (mW) | Max. Power (P _{max}) (mW) |
|-------------------------|--|---------------------------------------|--|-------------------------------------|
| AL7020S in a call @PCL5 | 270 | 350 | | |
| Average Idle | 25 | 40 | | |

Additional Documentation:

| Document Name | Doc Nr. |
|-------------------|----------|
| Designers Guide | DG_7020B |
| AT Command Manual | AT_7020A |

| Contact Information | |
|---|--|
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