



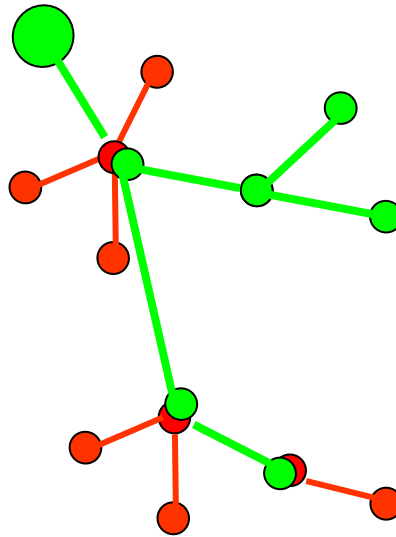
IT900A DCSK TURBO

The next generation in Powerline Communication (PLC) networking at 500kbps, IT900A DCSK Turbo provides fully integrated PLC modem and application solution on a single chip to feature DCSK Turbo speed and robustness.



HOME/BUILDING AUTOMATION APPLICATIONS

- HVAC Control
- Security and Access
- Lighting Control
- Appliance Control
- Remote Diagnostics
- Telehealth Monitoring
- Street Light control
- And more...



ENERGY MANAGEMENT/SMART GRID APPLICATIONS

- Automated Meter Reading
- Automated Meter Management
- Advanced Metering Infrastructure
- Utility theft detection
- Pay per use metering
- Solar Panel control
- Consumer Indexing Solutions
- And more...

IT900A offers a full protocol stack to meet the demands of Energy Management/Smart Grid including (AMR/AMM/AMI) and Home/Building Automation.

IT900A features high in-phase and cross-phase reliability and offers Yitran's next generation DCSK Turbo technology to enable a high level of code efficiency, robustness and transmission speeds of up to 500Kbps.

IT900A is fully interoperable with Yitran's IT800, IT700 & IT900, and complies with worldwide regulations (FCC, ARIB, CENELEC).

PHY LAYER

- Spread Spectrum DCSK Turbo
- Decision Feedback Equalizer
- Fully compliant with worldwide regulations FCC, Cenelec A&B, ARIB.
- Symbol Correlation with DFE.

MAC LAYER

- Adaptive Optimized CSMA/CA with Transmission Priority and Delay Control Mechanism.
- Transmission Services: Internetwork Unicast & Broadcast. Intranetwork Unicast & Broadcast.
- Upper Layer Channel and Packet Monitoring

Network Layer

- Plug & Play Network Setup
- Automatic and Adaptive Routing
- optimal for Automatic and Smart Metering Applications
- Optional Security Suite

PARAMETER	VALUE	NOTE
Modulation SNR for AWGN SNR for CW noise	DCSK Turbo < -7dB < -60dB	Patented modulation technique
Frequency Operation Band	Within 100-400 kHz Within 9-95 kHz Within 95-125 kHz	FCC/ARIB Bands CENELEC Band A CENELEC Band B
Bit Rate	1.25 - 500 kbps 0.625 - 150 kbps 0.625 - 75 kbps	FCC/ARIB Bands CENELEC Band A CENELEC Band B
Error Correction	Forward short-block soft decoding error correction code and CRC-16	
Receiver Sensitivity	<1mV PTP	
Dynamic Range	>100dB	
Interface	UART / SPI / I ² C / JTAG / dedicated A/D	Simple command language
Package	QFN 64 pins	
I/Os	22 general purpose I/Os	
Rx Power Consumption	< 80mW	
Network Size	2000 nodes	



YITRAN TECHNOLOGIES
POWERING THE
SMART GRID

www.yitran.com

© Yitran Technologies Ltd. All products and service names mentioned herein are the trademarks of their respective owners.

HEADQUARTERS

8 Hagoren St.
Omer Industrial Park
Omer 84106
ISRAEL
T +972 8 623 5281
F +972 8 623 5282
yitran@yitran.com

INDIA

11 Hitaveda Arcade, 8th Main Rd
Jayanagar 3rd Block,
Bengaluru-560078, KA
T +91 99720 65656

CHINA

APT# 1506, Building 13,
Qingnianhu Beili,
Dongcheng Dist,
Beijing,
China 100011