

PRODUCT OVERVIEW

The TELiG G2000 by Council Rock is a powerful computing platform based on the latest wireless standards. This platform allows utilities to integrate all middle mile applications onto a single platform in a secure, reliable manner.

The G2000 utilizes an ARM Cortex A9 processor and has Private LTE or WiMax as its primary backhaul technology. Extender technologies such as Wi-SUN and WiFi are also embedded, along with GPS and the latest security protocols.

The integration of these technologies onto a powerful, modular computing platform ensures utilities that their investment is future-proof. Software and apps that are developed for smart infrastructure can be supported due to powerful processing capabilities and ample memory.

WHY CHOOSE TELiG BY COUNCIL ROCK?

Unified Networks - Provides communications from utility pole to substation for AMI backhaul, distribution automation, renewables, and field force automation on one platform using the most reliable, low latency, bandwidth rich wireless technologies.

Edge Computing - Powerful processing and sufficient memory to ensure any utility software or application can be supported.

Future Proof - Modular technology approach and the use of leading wireless standards ensure that your capital investment is protected and can be leveraged. Extend your network applications, add mobility, integrate smart cities - all possible with this approach.

FEATURES

- Multiple private frequency bands supported
- Modular design allows multiple configuration options and technology evolution
- Battery Management System includes an automatic low voltage disconnect and alarms for maintenance
- Public LTE available for communications redundancy
- Self-Provisioning for easy installation
- GPS and gyroscope for asset tracking and damage alarms



COMMUNICATIONS FEATURES

- Multi-Band LTE Backhaul - 900MHz, 2.3 GHz, CBRS (WiMAX and LTE)
- Embedded Wi-Sun
- Built-in GPS and Gyroscope
- Optional WiFi
- Communications ports:
Up to 4 Ethernet (RJ45) and
2 Serial (RJ45) RS232/RS485/RS422
- Fully programmable I/O capabilities
- SNMP or COAP management system

ELECTRICAL SPECIFICATIONS

- 100-240 VAC; 50/60 Hz
- Power Consumption (Peak) 50 W
- Battery Backup 10 Hours @ 50% Duty Cycle
- Safety Mechanical Disconnect

MECHANICAL SPECIFICATIONS

- Dimensions: 11"Wx13"Hx9"D
- Weight: 21.78kg (48 lb)

ENVIRONMENTAL SPECIFICATIONS

- Enclosure type: NEMA 4X
- Temperature range: -40° to 75°C with
type test up to 85°C (185°F) for 16 hours
- Humidity: 95% at 40°C

REGULATORY COMPLIANCE

- IEEE1613
- IEC-61850-3
- 47 CFR, Part 15
- *FCC part 15 and IC

*This device has not been authorized as required by the rules of the Federal Communications Commission. This device is not, and may not be, offered for sale or lease, or sold or leased, until authorization is obtained.

SECURITY FEATURES

- External Tamper Switch with message alerts
- Crypto-authentication
- IEEE 802.1x-based authentication
- Certificate-based identity
[Radius and AAA support]
- Encryption : 3DES, AES 128/192/256,
SHA 256/384/512 HMAC
- Network Layer Encryption (IPsec)
- Stateful Layer 3 Firewall with MAC Filtering,
NAT, Source NAT, Static NAT, Port Forwarding
- FIPS 197

COMPUTING SPECIFICATIONS

- Freescale™ ARM® Cortex™ -A9 SoC Processor
- Up to 4GBytes DDR3 SDRAM Memory
- Up to 32GBytes eMMC Memory
- Serial Configuration EEPROM

NETWORKING FEATURES

- Bridging and routing
- Fully managed switch support (802.1q)
- Quality of Service (802.1p)
- Serial TCP server
- MODBUS/TCP, MODBUS RTU
- DNP3
- DHCP IPv6 and IPv4

PROTOCOL SPECIFICATIONS

- DNP3 Serial and IP
 - MODBUS Serial and IP
 - IPV4 and IPV6
 - IEC 60870-5-101/104 protocol translation
 - Mapping of Address and Port
Using Translation (MAP-T)
 - SNMP v1,v2 and v3
 - CoAP
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