NSB110 & NSB310 CIRCUIT BREAKER & POWER METER

SEAMLESSLY MONITORING AND CONTROLLING CIRCUIT BREAKERS

Elevate your electrical safety and management with this Nvirosense Series, known as the NSB110 for single-phase models and the NSB310 for three-phase models. These state-of-the-art smart Miniature Circuit Breakers (MCBs) enable real-time monitoring and control of electrical circuits. Utilizing the LoRaWAN Class C open protocol. Advanced features like real-time circuit breaker status monitoring, leak detection, and automatic alarms for electrical abnormalities put the Nvirosense Series at the cutting edge of electrical safety.

- LoRaWAN Class C: For real-time monitoring and seamless integration.
- Dual Voltage: AC 230V (NSB110) & AC 400V (NSB310).
- 6kA Breaking Capacity: For high short-circuit protection.
- **RS485 & Modbus-RTU:** Robust communication interfaces.
- Advanced Alarms: Overload, Overvoltage, etc. Optional leak detection.
- Multi-Protection: Short circuit, Overcurrent, Overvoltage, and more.
- **High Durability:** 10,000 mechanical and 6,000 electrical life cycles.

KEY SPECIFICATIONS



NSP210 with Look

Category	NSB110	NSB110 with Leak Detection	NSB310	NSB310 with Leak Detection
Communication Protocol	LoRaWAN Class C			
Rated Voltage	AC 230V	AC 230V	AC 400V	AC 400V
Rated Current	63A			
Breaking Capacity	6kA			
Mechanical Life	10,000 times			
Electrical Life	6,000 times			
Communication Interface	RS485, Modbus-RTU			
Alarm Functions	Overload, Overvoltage, Undervoltage, Temperature, Overpower	Leakage, Overload, Overvoltage, Undervoltage, Temperature, Overpower	Overload, Overvoltage, Undervoltage, Temperature, Overpower	Leakage, Overload, Overvoltage, Undervoltage, Temperature, Overpower
Protective Functions	Short circuit, Overcurrent, Overvoltage, Undervoltage, Over temperature, Overpower	Leakage, Short circuit, Overcurrent, Overvoltage, Undervoltage, Over temperature, Overpower	Short circuit, Overcurrent, Overvoltage, Undervoltage, Over temperature, Overpower	Leakage, Short circuit, Overcurrent Overvoltage, Undervoltage, Over temperature, Overpower
Leak Detection	No	Yes	No	Yes
Power Supply	DC 12V			
Operation Current	<100mA			

NCD110 with Look

FEATURES AT A GLANCE



YOUR WIRELESS NETWORK

Develop a fully owned private LoRa network to capture, route and process IoT data for your application at multiple facilities.



RUGGED DURABILITY WITH A BROAD SENSOR ARRAY

Robust enclosures provide a resilient platform for recording and delivering data from within a range of harsh environments.



COMPREHENSIVE SECURITY AND RELIABILITY

Robust multi-layer security at each interface to safeguard your network at every level.



BROAD CERTIFICATION AND APPROVALS

CFR 21 (part 11), PPECB, FCC, IC, CE, ASNZS, NCC, and Bluetooth SIG listing.



THE PLATFORM FOR BUILDING ACTIONABLE IOT INTELLIGENCE

Route sensor data to the cloud with NviroSense's simplified wireless connectivity deployment.



PERSONAL SUPPORT FOR YOUR IMPLEMENTATION

Support works with NviroSense engineering to help configure and deploy your application.

APPLICATION AREAS

NVIROSENSE SUPPORT



PHARMACEUTICAL WAREHOUSING



COLD CHAIN MANAGEMENT & FOOD SAFETY



IN-FIELD AGRICULTURAL MONITORING

E: <u>support@nvirosense.com</u>



INDUSTRIAL & MINING APPLICATIONS

W: www.nvirosense.com