

dsciSPEC™

DIGITAL GAMMA SPECTROMETER
WITH ETHERNET INTERFACE

The dsciSPEC digital spectrometer from ICx Technologies was designed to meet the challenging needs of remote monitoring with a wide range of scintillation detectors. This complete gamma spectrometer signal processing system is ideal for large area and environmental monitoring networks. The automatic, onboard gain stabilization provides for ease of use as no software is required. In addition, the simplified data output makes it easy for the dsciSPEC to be tied into a command center's network so that officials can be notified when specified radioactive sources have been detected.

The dsciSPEC is a high performance, digital gamma spectrometer housed in a 14-pin tube base. It provides high voltage, digital signal processing and MCA functions. Power, communications and control are provided through an Ethernet RJ-45 connection. The novel power over Ethernet (PoE) interface provides greater speed, flexibility and conductivity than a USB connection. The dsciSPEC provides real time and live time measurements, various presets and multiple spectra storage. It contains large spectrum memory as well as a battery powered real time clock synchronized through the IP time protocol.



FEATURES

- Complete gamma spectrometer based on Digital Signal Processing (DSP) in a 14-pin tube base
- Ideally suited for NaI and CsI detectors and compatible with basically all types of scintillation detectors
- Integrated RJ-45 Ethernet interface providing advantages of high throughput (100 Mbit), standard cables and connectors and long cable lengths
- Ideal for remote applications or large area environmental monitoring networks
- Operates on Power over Ethernet (PoE)

SPECIFICATIONS

PHYSICAL AND ELECTRICAL DIMENSIONS

Device	DSP-based MCA with detector HVPS (+200 V to +1250 V)
Material	Aluminium
Dimensions	2.5" x 4.6" (63 x 117 mm) without detector
Display	4 LEDs (Pink, Traffic, Link, 10/100 MBit)
Input Power	PoE compliant to 802.3af, 48V, < 100 mA; Supplied via provided PoE adapter or customer PoE equipped hub
Weight	0.6 lbs (270 g)

SPECTRUM PARAMETERS

Functions	PHA, pulse-height analysis (Standard), MPHA, multi input pulse-height analysis
Spectrum	1024 Channels
Presets	Real time, live time, counts
Data	32 Bit

ENVIRONMENTAL

Temperature	5 to 122 °F (-15 to 50 °C)
Humidity	Up to 80%, non condensing

DATA PROCESSING UNIT

Processor	32 Bit RISC, 66 MHz, Embedded UC Linux, Motorola Coldfire®
Protocols	IP-Family, ARP, TCP, ICMP, UDP, Telnet, FTP
Memory	16 MB SD-RAM, 8 MB FLASH
Operating system	Embedded Linux

CONNECTORS

Network	RJ-45 IP IEEE B335, PoE adapter included
Input	Externally triggered start/stop, MCX HF -Socket

SOFTWARE

winTMCA	Includes basic spectroscopy software
proSPEC-N	Gamma analysis software (optional)
Option	ActiveX component

