

**Information about the Applicant**

<b>Company Name</b>	Schweitzer Engineering Laboratories, Inc.
<b>Grantee</b>	Patrick A. Schacher
<b>Address</b>	2350 NE Hopkins Court
<b>City, State, Zip</b>	Pullman, WA 99163
<b>Job Number</b>	SCHW0044
<b>Model</b>	SEL-3021
<b>FCC ID</b>	R34SEL3X21
<b>Agent</b>	Northwest EMC
<b>Approval Type</b>	Original
<b>Equipment Class</b>	DTS Digital Transmission System
<b>Rule Part</b>	15.247

**Overview**

The Model SEL-3021 transmitter, FCC ID: R34SEL3X21. It is a spread spectrum transmitter that utilizes direct sequence modulation techniques. This transmitter is compliant with IEEE 802.11b specifications, and will be used only as a mobile transmitter. The EUT is comprised of the transmitter and a wired serial encrypting transceiver. The transmitter provides a wireless interface to the encrypting transceiver for the nonintrusive set-up and monitoring of the wired serial communications. The EUT can be configured with only one integral antenna that satisfies the requirements of 47 CFR 15.203.

**Recommendation**

All items have been resolved and completed to my satisfaction; therefore I recommend this application for approval.

**Signature**

10/12/2004

Dave Tolman, TCB Committee

## Findings

Opinions	
Specification Requirements	Description
47 Cfr 2.1033(b)(3)	Installation guide, operating instructions,user manual
Opinion	The device meets the requirements of the rule.
Discussion	The client has submitted the required information.
Reference	User Manual.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(4)	Operational description
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Operational Description.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(5)	Frequency block diagram
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Block Diagram.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(6)	Schematic diagram
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Schematics.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(7)	Internal and external photos
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Internal Photos.pdf, External Photos.pdf

Specification Requirements	Description
47 Cfr 2.1033(b)(6)	Conversions showing how the test results were achieved
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	RF Exposure.pdf

Specification Requirements	Description
Required Exhibit	Test Setup Photo Exhibit
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report_SCHW0043.pdf

Specification Requirements	Description
47 Cfr 1.1307(b),2.1091,2.1093	RF Exposure Hazzard
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	RF Exposure.pdf

Specification Requirements	Description
47 Cfr 15.19	Labeling
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	User Manual.pdf, Label.pdf

Specification Requirements	Description
47 Cfr 15.21	Information for user
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	User Manual.pdf

Specification Requirements	Description
47 Cfr 15.27	Special accessories
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report_SCHW0043.pdf

Specification Requirements	Description
47 Cfr 15.33	Frequency range of tests
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report_SCHW0043.pdf

Specification Requirements	Description
47 Cfr 15.35	Measurement detectors
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report_SCHW0043.pdf

Specification Requirements	Description
<b>ANSI C63.4 EUT Ports</b>	All EUT ports populated,emissions maximized,Antenna height adjusted
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report_SCHW0043.pdf

Specification Requirements	Description
<b>47 Cfr 15.203</b>	Antenna Requirements
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report_SCHW0043.pdf

Specification Requirements	Description
<b>47 Cfr 15.205</b>	Restricted bands
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report_SCHW0043.pdf

Specification Requirements	Description
<b>47 Cfr 15.207</b>	Power line Conducted emissions
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report_SCHW0043.pdf

Specification Requirements	Description
<b>47 Cfr 15.209</b>	Spurious Emissions
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report_SCHW0043.pdf

Specification Requirements	Description
<b>47 Cfr 15.247(a)</b>	Occupied Bandwidth
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report_SCHW0043.pdf

Specification Requirements	Description
<b>47 Cfr 15.247(b)</b>	Output Power
<b>Opinion</b>	The device meets the requirements of the rule.
<b>Discussion</b>	The client has provided the necessary exhibit.
<b>Reference</b>	Report_SCHW0043.pdf

Specification Requirements	Description
47 Cfr 14.247(c)	Band Edge Compliance
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report_SCHW0043.pdf

Specification Requirements	Description
47 Cfr 14.247(c)	Spurious Conducted Emissions
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report_SCHW0043.pdf

Specification Requirements	Description
47 Cfr 14.247(c)	Spurious Radiated Emissions
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report_SCHW0043.pdf

Specification Requirements	Description
47 Cfr 14.247(d)	Power Spectral Density
Opinion	The device meets the requirements of the rule.
Discussion	The client has provided the necessary exhibit.
Reference	Report_SCHW0043.pdf