1.54 µm

MICROCHIP DPSS LASER SOURCES



PRODUCT CATALOG | SEPTEMBER 2026 | ERDI TECH LTD

12
MODELS

Optical
SPECIFICATIONS
Model level data

Electrical
LIMITS

Mechanical
DIMENSIONS
Model level data

Conditions
PERFORMANCE
As stated per model

Documents
REFERENCES
Matching source files

Model specifications and source references
Cover image: MINI-100. Source-provided MINI-100 illustration, reproduced without alteration; not to scale.

About this catalog

This catalog presents ERDI microchip DPSS laser sources by model. The 1.54 µm series label follows the website grouping. Wavelength entries retain each model source's stated value; differing source revisions require confirmation. Refer to the matching document for complete conditions.

How to read the specifications

Each entry belongs to the exact model named at the top of the page. A range, pulse energy or safety statement for one model does not apply to another model.

Read maximum range together with target size, reflectivity, visibility and any other stated test conditions. Values described as typical, minimum or maximum retain that meaning.

TBC indicates that a value or supplied configuration requires confirmation. Where documents disagree, the affected entry carries a note rather than silently combining different versions.

Product illustrations identify the source document and are not dimensional drawings. Confirm mounting geometry using the controlled drawing for the supplied configuration.

This is a catalog of key specifications. The individual manual remains necessary for installation, electrical limits, handling and safety. Never infer system-level eye safety from wavelength alone.

Selection values reproduce individual-model tables, not a guarantee of simultaneous energy, repetition rate and temperature performance. Engineering confirmation is needed for flagged conflicts and the delivered configuration; supplied factory reports control driver setup.

Wavelength tolerance, optical pulse-width tolerance, stability statistic, beam-diameter convention and divergence full/half-angle are unspecified. Table drive limits are not operating instructions, and package dimensions are not an independently measured installation envelope.

All individual tables give an operating range of -40 to +65 °C; the horizontal sample's -45 °C minimum is not adopted. Most individual tables specify storage up to +75 °C, unlike the sample's +85 °C. MINI-100 and the explicitly flagged revisions require model-specific attention.

The horizontal sample is a layout reference: merged columns shift some dimensions, masses and currents. Retain individual-model entries. Beam diameters are 0.3, 0.5 or 0.8 mm by model, not the sample's repeated 0.3 mm.

Images are unaltered extractions from the supplied manuals. ER100/ER200/ER300/ER400/ER500, ER2000/ER4000 and ER8000/ER10000 respectively share family illustrations. They do not establish unique model geometry or scale; native high-resolution model photographs were not supplied.

Generic Class 1/Class 1M statements do not certify an OEM system. Independent laser-safety classification, endurance, environmental certification and complete-system ranging performance are not established by this catalog.

Product documents and contact

Use the links on each model page to view its product record and supporting documentation. For a technical inquiry, include the exact model, required quantity, application conditions and the parameter you need confirmed.

erdilrf.com

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Model directory

Microchip DPSS laser sources

Model	Product group	Page
MINI-100	Microchip DPSS laser sources	4
ER100	Microchip DPSS laser sources	5
ER200	Microchip DPSS laser sources	6
ER300	Microchip DPSS laser sources	7
ER400	Microchip DPSS laser sources	8
ER500	Microchip DPSS laser sources	9
ER800	Microchip DPSS laser sources	10
ER900	Microchip DPSS laser sources	11
ER2000	Microchip DPSS laser sources	12
ER4000	Microchip DPSS laser sources	13
ER8000	Microchip DPSS laser sources	14
ER10000	Microchip DPSS laser sources	15

Each model entry includes key specifications, conditions and its document reference.

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MINI-100



Source-provided MINI-100 illustration, reproduced without alteration; not to scale.

MINI-100 is a pulsed erbium-glass microchip DPSS laser source in ERDI's 1.54 μm series, with source-table pulse energy of ≥100 μJ.

Parameter	Specification
Wavelength	1535 nm
Pulse energy	≥100 μJ
Optical pulse width	3.5 ns
Pulse repetition rate	1-10 Hz
Pulse stability (source label)	10%
Raw beam diameter	0.3 mm
Beam divergence	≤10 mrad
Beam mode	TEM00
Operating temperature	-40 to +65 °C
Storage temperature	-55 to +85 °C
Dimensions (table)	14.5 × 6.3 × 4.37 mm
Mass	2.5 g
Drive voltage / current (table)	2 V / 12 A (table; see note)
Drive pulse width (table)	≤1 ms (table; see note)

Driver conflict: table 12 A / ≤1 ms; page 2 names ER100 and gives 8 A / <2 ms. Do not use the copied settings; obtain the MINI-100 factory report.

Desktop and website PDFs differ, although core tables agree. MINI-100's table specifies storage up to +85 °C.

Reference: MINI-100.pdf, pages 1, 2.

View MINI-100 product and documentation

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ER100



Shared family illustration from the ER100 source manual; not a model-specific dimensional photograph.

ER100 is a pulsed erbium-glass microchip DPSS laser source in ERDI's 1.54 μm series, with source-table pulse energy of ≥100 μJ.

Parameter	Specification
Wavelength	1.54 μm
Pulse energy	≥100 μJ
Optical pulse width	6 ns (table; see note)
Pulse repetition rate	1-10 Hz
Pulse stability (source label)	10%
Raw beam diameter	0.3 mm
Beam divergence	≤8 mrad
Beam mode	TEM00
Operating temperature	-40 to +65 °C
Storage temperature	-55 to +75 °C
Dimensions (table)	21 × 8 × 6.8 mm
Mass	7 g
Drive voltage / current (table)	2 V / 8 A
Drive pulse width (table)	≤2.4 ms (table; see note)

Optical width: individual table 6 ns; horizontal sample 5 ns. The qualified table value is retained.

Drive width: table ≤2.4 ms; operating instruction <2 ms at 8 A / 10 Hz, load <2 V. Do not substitute the table maximum for operating instructions.

Lifetime is omitted: introduction and table disagree, at least 10 million versus at least 1 million pulses.

Reference: ER100.pdf, pages 1, 2.

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ER200



Shared family illustration from the ER200 source manual; not a model-specific dimensional photograph.

ER200 is a pulsed erbium-glass microchip DPSS laser source in ERDI's 1.54 μm series, with source-table pulse energy of ≥200 μJ.

Parameter	Specification
Wavelength	1.54 μm
Pulse energy	≥200 μJ
Optical pulse width	5 ns
Pulse repetition rate	1-10 Hz (table; see note)
Pulse stability (source label)	10%
Raw beam diameter	0.3 mm
Beam divergence	≤8 mrad (table; see note)
Beam mode	TEM00
Operating temperature	-40 to +65 °C
Storage temperature	-55 to +75 °C (table; see note)
Dimensions (table)	21 × 8 × 6.8 mm
Mass	7 g
Drive voltage / current (table)	2 V / 10 A
Drive pulse width (table)	≤2.4 ms (table; see note)

Divergence conflicts: introduction 0.3 mrad; table ≤8 mrad. Confirm the intended optical configuration.

Desktop table: 1-10 Hz, storage +75 °C maximum, 1.54 μm. Website/older English PDF: 10 Hz, +85 °C, 1535 nm. Applicable revision requires confirmation.

Drive width: table ≤2.4 ms; operating instruction <2 ms at 10 A / 10 Hz, load <2 V.

Reference: ER200.pdf, pages 1, 2.

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ER300



Shared family illustration from the ER300 source manual; not a model-specific dimensional photograph.

ER300 is a pulsed erbium-glass microchip DPSS laser source in ERDI's 1.54 μm series, with source-table pulse energy of ≥300 μJ.

Parameter	Specification
Wavelength	1535 nm
Pulse energy	≥300 μJ
Optical pulse width	5 ns
Pulse repetition rate	1-10 Hz
Pulse stability (source label)	10%
Raw beam diameter	0.3 mm
Beam divergence	≤7 mrad
Beam mode	TEM00
Operating temperature	-40 to +65 °C
Storage temperature	-55 to +75 °C
Dimensions (table)	25 × 8 × 6.8 mm
Mass	8.5 g
Drive voltage / current (table)	2 V / 12 A
Drive pulse width (table)	≤2.4 ms (table; see note)

The individual table gives 25 × 8 × 6.8 mm and 8.5 g; shifted horizontal-sample columns are not adopted.

ER400 EN.pdf in this folder is a different-model document, not ER300 evidence.

Drive width: table ≤2.4 ms; operating instruction <2 ms at 12 A / 10 Hz, load <2 V.

Reference: ER300.pdf, pages 1, 2.

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ER400



Shared family illustration from the ER400 source manual; not a model-specific dimensional photograph.

ER400 is a pulsed erbium-glass microchip DPSS laser source in ERDI's 1.54 μm series, with source-table pulse energy of ≥400 μJ.

Parameter	Specification
Wavelength	1535 nm
Pulse energy	≥400 μJ
Optical pulse width	6 ns
Pulse repetition rate	1-10 Hz (table; see note)
Pulse stability (source label)	10%
Raw beam diameter	0.3 mm
Beam divergence	≤7 mrad
Beam mode	TEM00
Operating temperature	-40 to +65 °C
Storage temperature	-55 to +75 °C (table; see note)
Dimensions (table)	35 × 8 × 6.8 mm
Mass	12 g
Drive voltage / current (table)	2 V / 15 A
Drive pulse width (table)	≤2.4 ms (table; see note)

Desktop table: 1-10 Hz and storage +75 °C maximum. Website/older English PDF: 10 Hz and +85 °C. Confirm the applicable revision.

Drive width: table ≤2.4 ms; operating instruction <2 ms at 15 A / 10 Hz, load <2 V.

Dimensions/mass remain the individual table's 35 × 8 × 6.8 mm / 12 g, not shifted horizontal-sample values.

Reference: ER400.pdf, pages 1, 2.

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ER500



Shared family illustration from the ER500 source manual; not a model-specific dimensional photograph.

ER500 is a pulsed erbium-glass microchip DPSS laser source in ERDI's 1.54 μm series, with source-table pulse energy of ≥500 μJ.

Parameter	Specification
Wavelength	1535 nm
Pulse energy	≥500 μJ
Optical pulse width	6 ns
Pulse repetition rate	1-10 Hz
Pulse stability (source label)	10%
Raw beam diameter	0.3 mm
Beam divergence	≤7 mrad
Beam mode	TEM00
Operating temperature	-40 to +65 °C
Storage temperature	-55 to +75 °C
Dimensions (table)	35 × 8 × 6.8 mm
Mass	12 g
Drive voltage / current (table)	2 V / 20 A
Drive pulse width (table)	≤2.4 ms (table; see note)

ER500 EN.pdf identifies ER400 and 400 μJ; it is rejected. The individual ER500 table supports ≥500 μJ.

Drive width: table ≤2.4 ms; operating instruction <2 ms at 20 A / 10 Hz, load <2 V.

Dimensions/mass remain the individual table's 35 × 8 × 6.8 mm / 12 g, not shifted horizontal-sample values.

Reference: ER500.pdf, pages 1, 2.

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ER800



Source-provided ER800 illustration, reproduced without alteration; not to scale.

ER800 is a pulsed erbium-glass microchip DPSS laser source in ERDI's 1.54 μm series, with source-table pulse energy of ≥800 μJ.

Parameter	Specification
Wavelength	1535 nm
Pulse energy	≥800 μJ
Optical pulse width	7 ns
Pulse repetition rate	1-10 Hz (table; see note)
Pulse stability (source label)	10%
Raw beam diameter	0.3 mm
Beam divergence	≤7 mrad
Beam mode	TEM00
Operating temperature	-40 to +65 °C
Storage temperature	-55 to +75 °C (table; see note)
Dimensions (table)	40 × 8 × 7.5 mm
Mass	18 g
Drive voltage / current (table)	2 V / 30 A
Drive pulse width (table)	≤3 ms (table; see note)

Rate conflict: main table 1-10 Hz; operation 10 Hz; older English file 5 Hz; sample 1-5 Hz. Confirm the delivered configuration.

Storage conflict: primary table +75 °C maximum; older English file +85 °C.

Drive width: table ≤3 ms; operating instruction <3 ms at 30 A / 10 Hz, load <2 V. A constant-current driver and factory-report settings are specified.

Reference: ER800.pdf, pages 1, 2.

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ER900



Source-provided ER900 illustration, reproduced without alteration; not to scale.

ER900 is a pulsed erbium-glass microchip DPSS laser source in ERDI's 1.54 μm series, with source-table pulse energy of ≥900 μJ.

Parameter	Specification
Wavelength	1535 nm
Pulse energy	≥900 μJ
Optical pulse width	7 ns
Pulse repetition rate	1-5 Hz
Pulse stability (source label)	10%
Raw beam diameter	0.3 mm
Beam divergence	≤7 mrad
Beam mode	TEM00
Operating temperature	-40 to +65 °C
Storage temperature	-55 to +75 °C (table; see note)
Dimensions (table)	40 × 8 × 7.5 mm
Mass	18 g
Drive voltage / current (table)	2 V / 30 A
Drive pulse width (table)	≤3 ms (table; see note)

The route says '1mj', but the individual table specifies ≥900 μJ; no ≥1 mJ guarantee is inferred.

Storage conflict: primary table +75 °C maximum; introduction/older English file +85 °C.

Drive width: table ≤3 ms; operating instruction <3 ms at 30 A / 5 Hz, load <2 V.

Reference: ER900.pdf, pages 1, 2.

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ER2000



Shared family illustration from the ER2000 source manual; not a model-specific dimensional photograph.

ER2000 is a pulsed erbium-glass microchip DPSS laser source in ERDI's 1.54 μm series, with source-table pulse energy of ≥2 mJ.

Parameter	Specification
Wavelength	1535 nm
Pulse energy	≥2 mJ
Optical pulse width	12 ns
Pulse repetition rate	TBC; conflicting 1-5 / 1-10 Hz records
Pulse stability (source label)	10%
Raw beam diameter	0.5 mm
Beam divergence	≤4 mrad
Beam mode	TEM00
Operating temperature	-40 to +65 °C
Storage temperature	-55 to +75 °C
Dimensions (table)	60 × 25 × 13.5 mm
Mass	105 g
Drive voltage / current (table)	≤5 V / 80 A
Drive pulse width (table)	≤4 ms (table; see note)

Rate is TBC: desktop table 1-5 Hz and operation 5 Hz; current website table 1-10 Hz, contradicting its own 1-5 Hz introduction. Obtain configuration confirmation.

Lifetime is omitted: introduction claims at least 10 million pulses; table gives more than 1 million.

Drive width: table ≤4 ms; operating instruction <4 ms at 80 A / 5 Hz, load <5 V.

Reference: ER2000.pdf, pages 1, 2.

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ER4000



Shared family illustration from the ER4000 source manual; not a model-specific dimensional photograph.

ER4000 is a pulsed erbium-glass microchip DPSS laser source in ERDI's 1.54 μm series, with source-table pulse energy of ≥4 mJ.

Parameter	Specification
Wavelength	1535 nm
Pulse energy	≥4 mJ
Optical pulse width	12 ns
Pulse repetition rate	1-5 Hz (table; see note)
Pulse stability (source label)	10%
Raw beam diameter	0.5 mm
Beam divergence	≤4 mrad
Beam mode	TEM00
Operating temperature	-40 to +65 °C
Storage temperature	-55 to +75 °C
Dimensions (table)	60 × 25 × 13.5 mm
Mass	105 g
Drive voltage / current (table)	≤5 V / 100 A
Drive pulse width (table)	≤4 ms (table; see note)

Rate conflicts within the model PDF: introduction 1-10 Hz; table 1-5 Hz; operating instruction 5 Hz. Confirm before making a frequency commitment.

Current: primary table 100 A; horizontal sample 80 A. The individual-model value is retained.

Drive width: table ≤4 ms; operating instruction <4 ms at 100 A / 5 Hz, load <5 V.

Reference: ER4000.pdf, pages 1, 2.

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ER8000



Shared family illustration from the ER8000 source manual; not a model-specific dimensional photograph.

ER8000 is a pulsed erbium-glass microchip DPSS laser source in ERDI's 1.54 μm series, with source-table pulse energy of ≥8 mJ.

Parameter	Specification
Wavelength	1535 nm
Pulse energy	≥8 mJ
Optical pulse width	13 ns (table; see note)
Pulse repetition rate	1-5 Hz
Pulse stability (source label)	5%
Raw beam diameter	0.8 mm
Beam divergence	≤4 mrad
Beam mode	TEM00
Operating temperature	-40 to +65 °C
Storage temperature	-55 to +75 °C
Dimensions (table)	110 × 40 × 24.5 mm
Mass	220 g
Drive voltage / current (table)	≤14 V / 100 A
Drive pulse width (table)	≤4 ms (table; see note)

Optical width: primary table 13 ns; horizontal sample 12 ns.

Drive/dimension conflict: primary table ≤14 V / 100 A and 24.5 mm height; horizontal sample ≤15 V / 80 A and 24 mm.

Drive width: table ≤4 ms; operating instruction <4 ms at 100 A / 5 Hz, load <14 V.

Reference: ER8000.pdf, pages 1, 2.

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ER10000



Shared family illustration from the ER10000 source manual; not a model-specific dimensional photograph.

ER10000 is a pulsed erbium-glass microchip DPSS laser source in ERDI's 1.54 μm series, with source-table pulse energy of ≥10 mJ.

Parameter	Specification
Wavelength	1535 nm
Pulse energy	≥10 mJ
Optical pulse width	12 ns
Pulse repetition rate	1-5 Hz
Pulse stability (source label)	5%
Raw beam diameter	0.8 mm
Beam divergence	≤4 mrad
Beam mode	TEM00
Operating temperature	-40 to +65 °C
Storage temperature	-55 to +75 °C
Dimensions (table)	110 × 40 × 24.5 mm
Mass	220 g
Drive voltage / current (table)	≤14 V / 100 A
Drive pulse width (table)	≤4 ms (table; see note)

Drive/dimension conflict: primary table ≤14 V / 100 A and 24.5 mm height; horizontal sample ≤15 V / 80 A and 24 mm.

Drive width: table ≤4 ms; operating instruction <4 ms at 100 A / 5 Hz, load <14 V.

Reference: ER10000.pdf, pages 1, 2.

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