

## License cost for software package LIRA 10.14 modules

Prices are given in Euros

LIRA 10.14	Configuration				Cost of modules
	MINI <sup>5</sup> (5000 nodes or elem.)	BASE	PROFF	FULL	
<p><b>Basic configuration:</b></p> <ul style="list-style-type: none"> <li>- graphical user interface;</li> <li>- linear static analysis;</li> <li>- dynamic analysis by eigenfrequencies expansion method(accelerogram, seismic by normative documents (38 modules)<sup>1</sup>, harmonic, impulse, impact, wind pulsation);</li> <li>- calculation of design combinations of forces (DCF);</li> <li>- calculation of design combinations of loads (DCL);</li> <li>- calculation of loads on fragment of the structure (FRAGMENT);</li> <li>- strength of cross section test (LITERA);</li> <li>- cross section designer (CSD);</li> <li>- condensation of masses (mass redistribution into defined nodes of the design model);</li> <li>- floor nodal reaction spectrums;</li> <li>- editable rolled steel database;</li> <li>- editable materials database (concrete, reinforcement, rolled steel, wood);</li> <li>- documentation system;</li>   <li>- application programming interface(LiraAPI);</li> <li>- Revit Structure→LIRA 10→Revit Structure;</li> <li>- AutoCad→LIRA 10 →AutoCad;</li> <li>- Tekla Structure→LIRA 10 →Tekla Structure;</li> <li>-Advance Steel →LIRA 10 →Advance Steel;</li> <li>-Renga →LIRA 10;</li> <li>- integration with graphic and calculation systems based on formats: *.msh; *.stl; *.obj; *.mesh; *.off; *.poly; *.dxf; *.igs; *.3ds; *.neu; *.byu; *.ifc; *.vol; *.sli; *.sdnf;</li> <li>-integration with documentation systems based on formats: *.docx; *.xlsx; *.csv; *.pptx; *.html; *.bmp; *.gif; *.png; *.jpeg; *.tiff; *.avi;</li> </ul> <p><b>Application Utilities:</b></p> <ul style="list-style-type: none"> <li>- seismogram by accelerogram;</li> <li>- accelerogram by seismogram;</li> <li>- unit converter;</li> <li>- scientific calculator;</li> <li>- interpolation of data;</li> <li>- calculation of pile's stiffness;</li> <li>- calculation of coefficients of subgrade reaction;</li> <li>- wall thickness of glaze ice;</li> <li>- local calculation of reinforced concrete bar;</li> <li>- local calculation of reinforced concrete plate;</li> <li>- columns' effective length</li> <li>- calculation of steel deck</li> </ul>	✓	✓	✓	✓	2 000 <sup>4</sup>
<p><b>Stability:</b></p> <ul style="list-style-type: none"> <li>- calculation of safety factors and buckling modes of the structure.</li> </ul>	✓	✓	✓	✓	250
<p><b>Design system of reinforced concrete structures (RCS):</b></p> <ul style="list-style-type: none"> <li>- check and reinforcement proportioning for RC elements;</li> <li>- check and reinforcement proportioning for pipe-concrete</li> </ul>	✓	✓	✓	✓	600

elements; - surface of bearing capacity; - punching of reinforced concrete slabs.					
<b>Design system for steel structures (SS):</b> - check and cross section proportioning of steel elements; - calculation logging; - checking cross sections of wooden elements.	✓	✓	✓	✓	450
<b>Wood</b>	✓	✓	✓	✓	200
<b>Soil:</b> - determination of natural foundation stiffness; - determination of pile foundation stiffness.		✓	✓	✓	800
<b>Physical and design nonlinearity</b>			✓	✓	600
<b>Geometrical nonlinearity</b>			✓	✓	600
<b>Assemblage:</b> - linear; - nonlinear (elements of physical, constructive and geometric nonlinearity); - direct dynamic analysis <sup>2</sup> of the assembled structure.			✓	✓	500
<b>Variation of models:</b> - unification of DCF problem package; - formation of DCF and DCL by downloads of problem package.			✓	✓	300
<b>Direct dynamic analysis (Dynamics+)</b> for action of accelerograms, seismograms and other dynamic loads for problems: - linear; - physically and constructively nonlinear; - geometrically nonlinear.				✓	500
<b>Bridge:</b> - influence surfaces; - rolling by the axes of the wheels; - calculation of multistage schemes.				✓	400
<b>Pushover Analysis (nonlinear quasi-static analysis of dynamic problems)<sup>3</sup>:</b> - by single-component accelerogram; - DBN V.1.1-12:2014; - STO NIU MGSU 2015; - EN 1998-1:2004.				✓	400
<b>Temperature field analysis:</b> - stationary and non-stationary <sup>2</sup> thermal conductivity problems (calculation of temperature distribution across structure); - considering of the obtained temperature field in the stress-strain state				✓	400
<b>Cross section calculation:</b> - determination of elastic and geometric properties, plastic, torsion, shear, mass-inertial and stiffness characteristics.				✓	400
<b>Filtration<sup>3</sup>:</b> - filtration modeling in water-saturated soil with calculation of distribution of fluid velocity and pressure; - depression curve construction; - considering of the obtained pore pressure in stress-strain				✓	200

state.					
	<b>1 500<sup>5</sup></b>	<b>4 300</b>	<b>6 300</b>	<b>8 600</b>	

<sup>1</sup>Implemented standards: SP 14.13330.2018 (with changes from №1), DBNV.1.1-12:2014 (with changes from 01.05.2019), SPRK 2.03-30-2017, SN i PKR20-02:2018, EN 1998-1:2004, IBC-2012:ASCE 7-10, KMK 2.01.03-96 (with changes from 01.04.2004), SNRA II-6.02-2006, TGN 2.01.08-2020, AzDTN 2.3-1-2010 (with changes from 01.01.2014), PN 01.01-09, SP 267.1325800.2016, SP 268.1325800.2016, GNIPT 22-07-2015, IS 1893 (Part 1):2002[2007], SI 413 Am.3 from 12.2013 etc.

<sup>2</sup>Upon the availability of Dynamics+ module

<sup>3</sup>Upon the availability of Physical non linearity module

<sup>4</sup>Upon purchase of separate systems highlighted item is mandatory

<sup>5</sup>Additional modules are not added to the **MINI** configuration

**Table 2. Discount system\* (when 2 or more licenses are acquired simultaneously)**

Number of simultaneously acquired licenses	MINI	Base	PROFF	FULL	
<b>2-3 licenses</b> (20% discount from cost)	1 200	3 440	5 040	6 880	
<b>4-5 licenses</b> (30% discount from cost)	1 050	3 010	4 410	6 020	
<b>From 5 licenses and more</b>	By agreement				

**Table 3. Cost of upgrade from previous versions**

Version / Configuration	MINI	Base	PROFF	FULL	Custom Optional configuration
<b>LIRA 10.12</b>	150	430	630	860	10%
<b>LIRA 10.8 - 10.10</b>	300	860	1 260	1 720	20%
<b>LIRA 10.x - 10.6</b>	600	1 720	2 520	3 440	40%

**Table 4. Special offers**

Configuration name	Cost
<b>LIRA 10.14 FULL for IHE</b>	<i>cooperation agreement</i>