

User Manual for



Software-as-a-Service Application

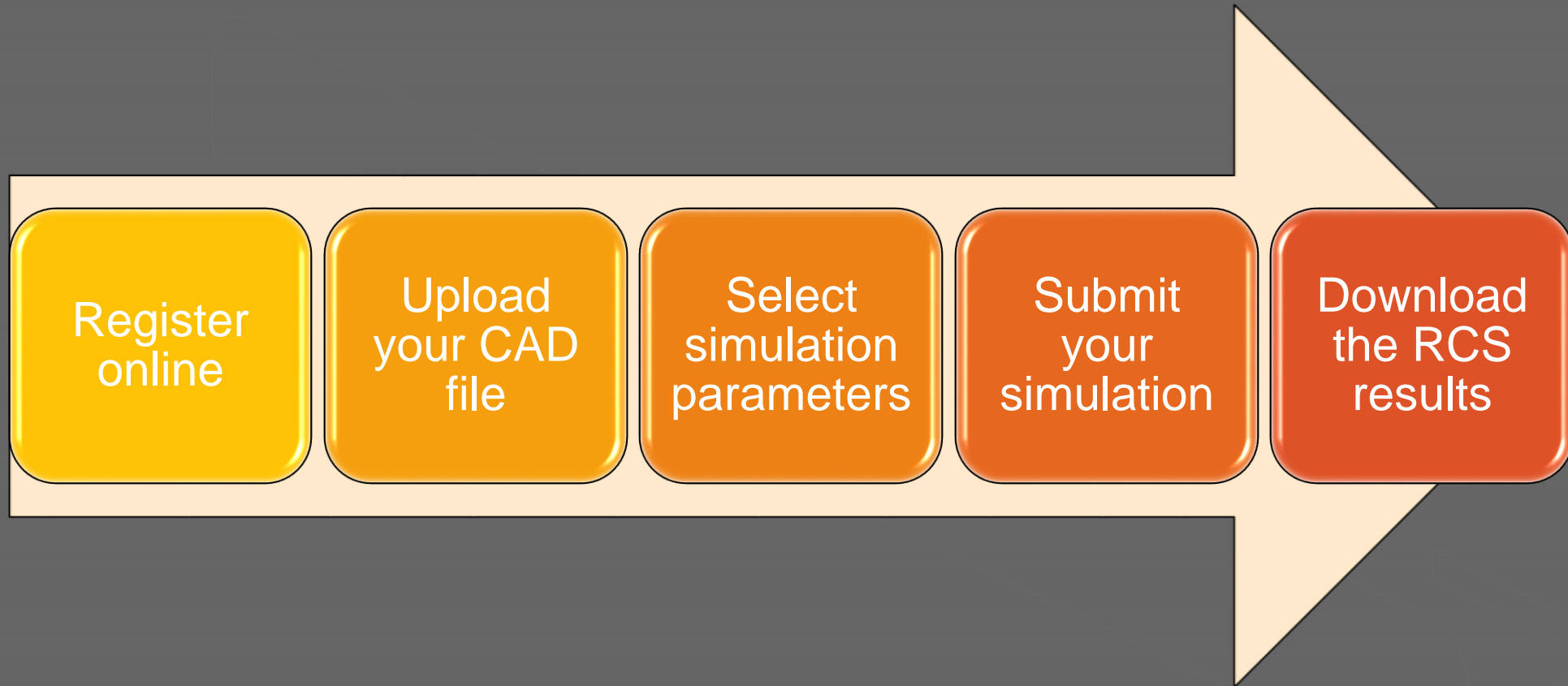
<https://predicsrcs.com>



Introduction

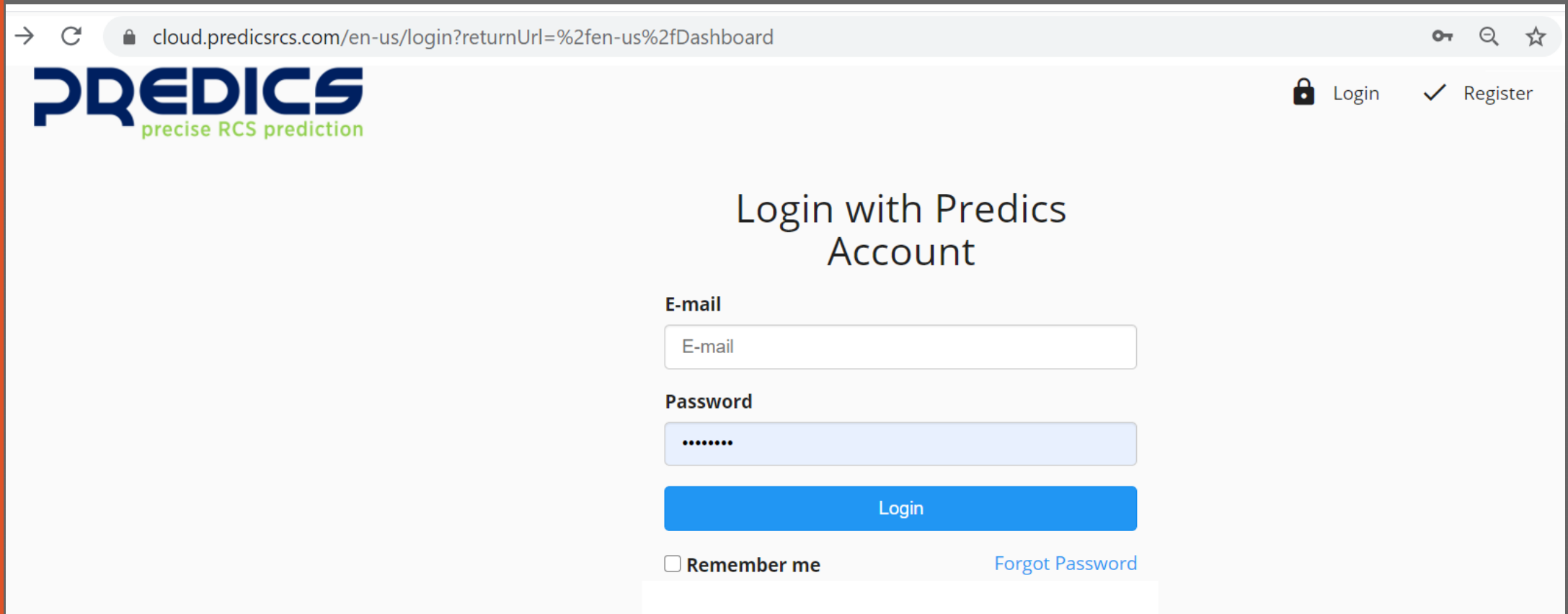
- This user-manual briefly describe how to use the ***PREDICS Radar Cross Section Simulation and Analysis*** software over the Internet by the help of Software-as-a-Service (SaaS) application,
- With this application, it becomes possible to submit an RCS and/or Inverse Synthetic Aperture Radar (ISAR) simulation from your computer without the need to buy the full license of PREDICS.
- You will be able to download the simulation results within minutes to your own computer.

General overflow of using PREDICS SaaS module



STEP 1 - Register

- Register online via <https://cloud.predicsrcs.com/> and form your own account



The screenshot shows a web browser window with the URL cloud.predicsrcs.com/en-us/login?returnUrl=%2fen-us%2fDashboard. The page features the Predics logo (precise RCS prediction) and navigation links for Login and Register. The main heading is "Login with Predics Account". Below this, there are input fields for "E-mail" and "Password", a blue "Login" button, and a "Remember me" checkbox with a "Forgot Password" link.

STEP 2 – Start new project

- Start a new simulation project by clicking "New Predics Request"

PREDICS
precise RCS prediction

Predics Requests

Search:

Show 10 entries

Creation Time	Modification Time	Status	Comment	Operations
02.02.2021 09:38	02.02.2021 09:38	Done		
27.01.2021 14:10	27.01.2021 14:10	Waiting		
15.01.2021 13:37	15.01.2021 13:37	Done		
12.01.2021 14:35	12.01.2021 14:35	Waiting		

Showing 1 to 4 of 4 entries

First Previous 1 Next Last

STEP 3 – Upload your CAD file

- Upload your CAD* file by clicking "Select File"

PREDICS
precise RCS prediction

Predics Requests Profile Logout

1 File 2 pRediCS - Simulation Configuration 3 Billing Information

File

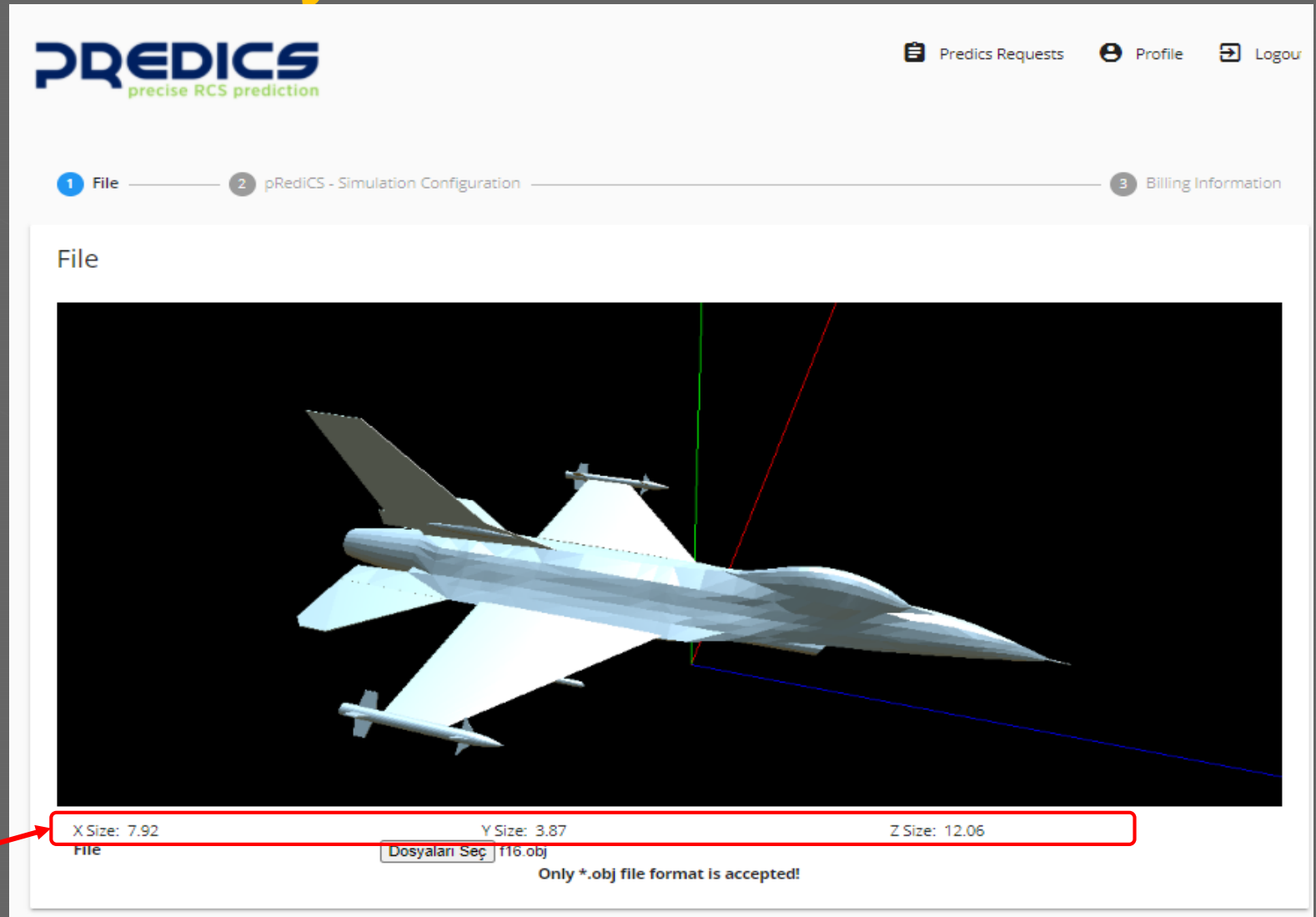
File

Dosyaları Seç Dosya seçilmedi
Only *.obj file format is accepted!

Continue »

STEP 4 - View your CAD file

- View your CAD file from the screen to make sure that it is correctly uploaded.
- Also note the dimension of the whole model.



STEP 5 – Enter Simulation parameters

- Start filling out RCS/ISAR simulation parameters

The screenshot shows the 'pRediCS - Simulation Configuration' step in a three-part process. The interface includes a progress bar with steps: 1. File, 2. pRediCS - Simulation Configuration (active), and 3. Billing Information. The main configuration area is titled 'pRediCS - Simulation Configuration' and contains two sections: 'Threads' and 'Method'.

Threads Section:

- Number of CPU Threads to Use: (Annotated with red text: *usually:8, max: 40*)
- Use CUDA GPU

Method Section:

- PO (Annotated with red text: *(for single bounce targets)*)
- PO + SBR (Annotated with red text: *(for complex, multi-bounce targets)*)
- PO + SBR + PTD (Annotated with red text: *(for complex, multi-bounce targets with improved accuracy)*)
- Wedge Angle (Degree): (Annotated with red text: *usually;30*)

Red arrows point from the 'select solver:' annotation to the three radio button options. Another red arrow points from the 'usually:8, max: 40' annotation to the 'Number of CPU Threads to Use' input field.

STEP 5 – Enter Simulation parameters

- Continue filling out RCS/ISAR simulation parameters

Units select proper unit for your CAD file

Inch
 cm
 meter
 mm
 mile

Simulation Mode select RCS or 2D/3D ISAR simulation mode

RCS Simulation
 2D ISAR Simulation
 3D ISAR Simulation

Options

select simulation accuracy:
high or moderate

Simulation Accuracy High v

select number of maximum number of
electromagnetic bounce scattering
(usually 5-10)

Max. Bounce Allowed 5

STEP 5 – Enter Simulation parameters

- Continue filling out RCS/ISAR simulation parameters

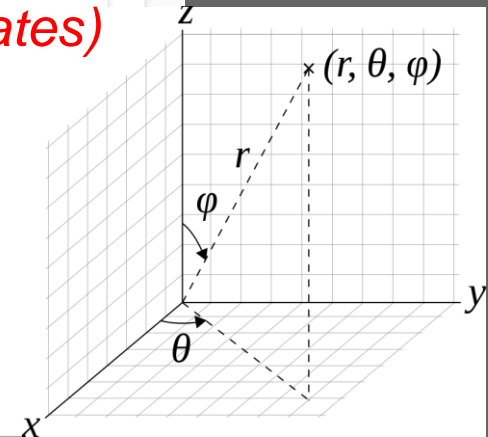
RCS Simulation Options

Frequencies *select frequencies for simulation*

Start (GHz) Stop (GHz) Step

Observation Angles *select look-angles for simulation (spherical coordinates)*

Theta, Phi EL, AZ
Theta or EL (Degree)
 Start Stop Step
Phi or AZ Range (Degree)
 Start Stop Step



save to finish

STEP 6 – Review your project before run

- Review your submission and you can order afterwards

PREDICS
precise RCS prediction

Predics Requests Predics Requests Profile Logout

[New Predics Request](#)

Search:

Creation Time: From To

Modification Time: From To

Status:

Comment:

Show entries

Creation Time	Modification Time	Status	Comment	Operations
02.02.2021 23:52	02.02.2021 23:52	Waiting		<input type="checkbox"/> <input type="text"/> <input type="download"/> <input type="trash"/>
02.02.2021 09:38	02.02.2021 09:38	Done		<input type="text"/> <input type="download"/> <input type="trash"/>
27.01.2021 14:10	27.01.2021 14:10	Waiting		<input type="checkbox"/> <input type="text"/> <input type="download"/> <input type="trash"/>
15.01.2021 13:37	15.01.2021 13:37	Done		<input type="text"/> <input type="download"/> <input type="trash"/>
12.01.2021 14:35	12.01.2021 14:35	Waiting		<input type="checkbox"/> <input type="text"/> <input type="download"/> <input type="trash"/>

Showing 1 to 5 of 5 entries First Previous 1 Next Last

STEP 7- Order and submit

- Securely complete your payment for the simulation via our secure payment module.

cloud.predicsrcs.com/en-US/Dashboard

Uygulamalar Gelen Kutusu - dr.c... c_ozdemir@yahoo... Google SmarterMailEMTECH HÜRRİYET - TÜRKİY... Mersin Üniversitesi TÜBİTAK TEYDEB Pr... Diğer yer işaretleri

PREDICS
precise RCS pred

Predics Requests

Search:

Creation Time

From	To
02.02.2021 23:52	
02.02.2021 09:38	
27.01.2021 14:10	
15.01.2021 13:37	
12.01.2021 14:35	

Showing 1 to 5 of 5 entries

Payment Information

Credit Card

Amount to be charged on your credit card: 361,95 ₺

Name: Ahmet Özdemir

Credit Card Number:

Expire Date (Month): Expire Date (Year):

CVV / CVC: Installment Count:

BUY NOW

Ok

New Predics Request

Show 10 entries

Operations

BUY NOW

First Previous 1 Next Last

STEP 8 – Download the results

- In minutes, you can download the simulation results as shown below.

The screenshot shows the 'Predics Requests' dashboard. At the top left is the Predics logo with the tagline 'precise RCS prediction'. On the top right, there are navigation links for 'Predics Requests', 'Profile', and 'Logout'. Below the header, there is a 'New Predics Request' button and a 'Show 10 entries' dropdown. The main content is a table with columns for 'Creation Time', 'Modification Time', 'Status', and 'Comment'. The table contains five rows of data. The second row is highlighted with a red border, and its 'Status' cell 'Done' is circled in red. To the right of the table, there are 'Operations' icons for each row, including a download icon. A red arrow points from the top right towards the 'Download File' tooltip that appears over the download icon of the highlighted row. At the bottom left, there is a file download indicator showing '7112bed6-4925-43....zip'. At the bottom right, there is a 'Tümünü göster' button.

Creation Time	Modification Time	Status	Comment	Operations
02.02.2021 23:52	02.02.2021 23:52	Waiting		[Icons]
02.02.2021 09:38	02.02.2021 09:38	Done		[Icons]
27.01.2021 14:10	27.01.2021 14:10	Waiting		[Icons]
15.01.2021 13:37	15.01.2021 13:37	Done		[Icons]
12.01.2021 14:35	12.01.2021 14:35	Waiting		[Icons]

STEP 9 – Review the simulated results

- The downloaded file is a folder has a unique name-tag for your project that contains:
 - RCS simulation results
 - Backscattered electric field (for PO+SBR and PO+SBR+PTD solvers)
- All results are given in full polarization (VV, VH, HV and HH)

DELL_PC > Masaüstü > UserManual > 7112bed6-4925-4349-9a1f-7f40d01d01e7

Ad	Değiştirme tarihi	Tür	Boyut
bd98e203-787a-45af-bb1e-be0d913dfbe3.eptd	2.02.2021 09:55	EPTD Dosyası	1 KB
bd98e203-787a-45af-bb1e-be0d913dfbe3.esbr	2.02.2021 09:55	ESBR Dosyası	81 KB
bd98e203-787a-45af-bb1e-be0d913dfbe3.etot	2.02.2021 09:55	ETOT Dosyası	81 KB
bd98e203-787a-45af-bb1e-be0d913dfbe3.log	2.02.2021 09:55	Metin Belgesi	1 KB
bd98e203-787a-45af-bb1e-be0d913dfbe3.obj	2.02.2021 09:50	OBJ File	445 KB
bd98e203-787a-45af-bb1e-be0d913dfbe3.rcs	2.02.2021 09:55	RCS Dosyası	48 KB
bd98e203-787a-45af-bb1e-be0d913dfbe3.rpj	2.02.2021 09:50	RPJ Dosyası	4 KB
ReadMePREDIRCS.txt	3.02.2021 10:03	TXT Dosyası	2 KB

- ReadMe.txt file gives the detailed explanation.

<https://predicsrcs.com>

For more information, please contact via



info@predicsrcs.com



Emtech Bilişim Teknolojileri / Emtech IT



www.emtechbilisim.com

<https://predicsrcs.com>