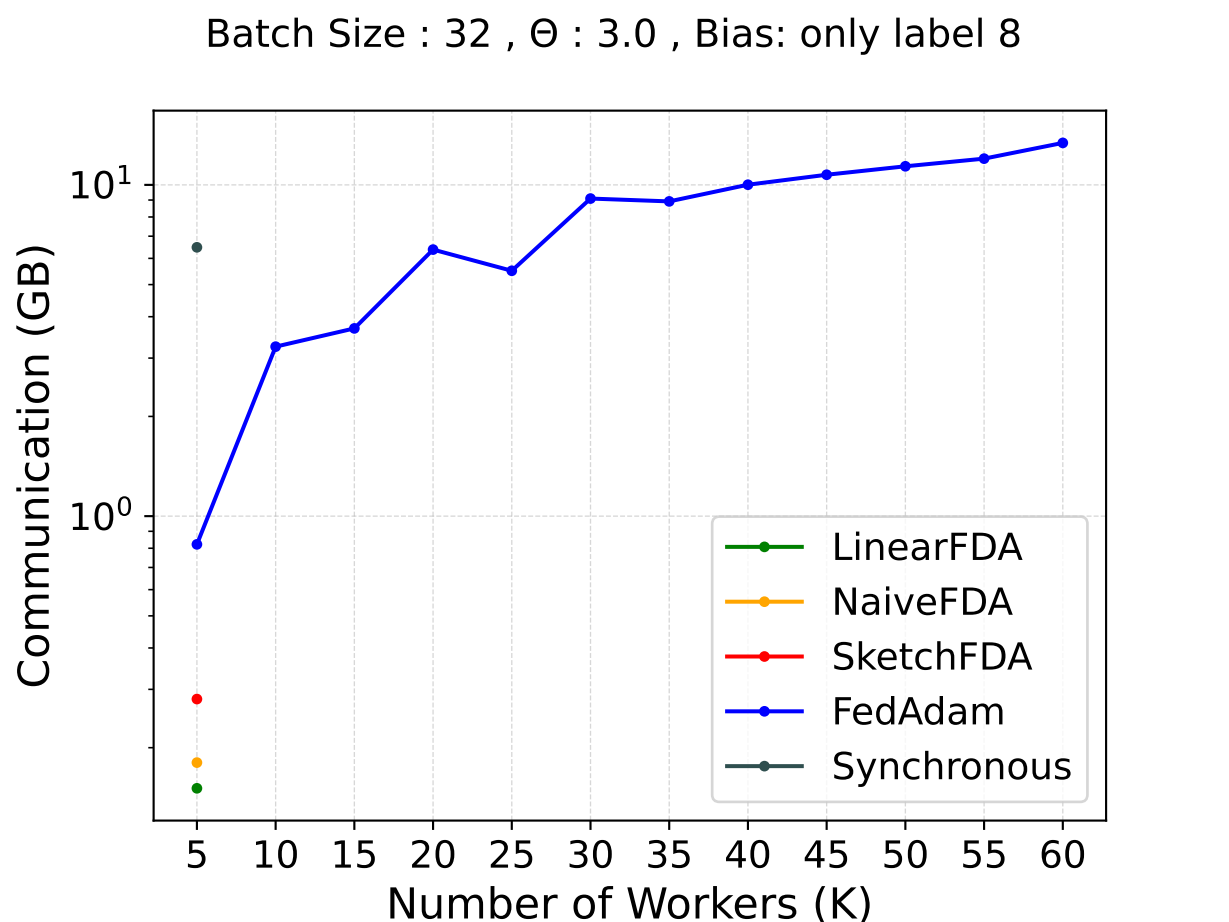
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Communication (GB)
10^1
10^0
5
10
15
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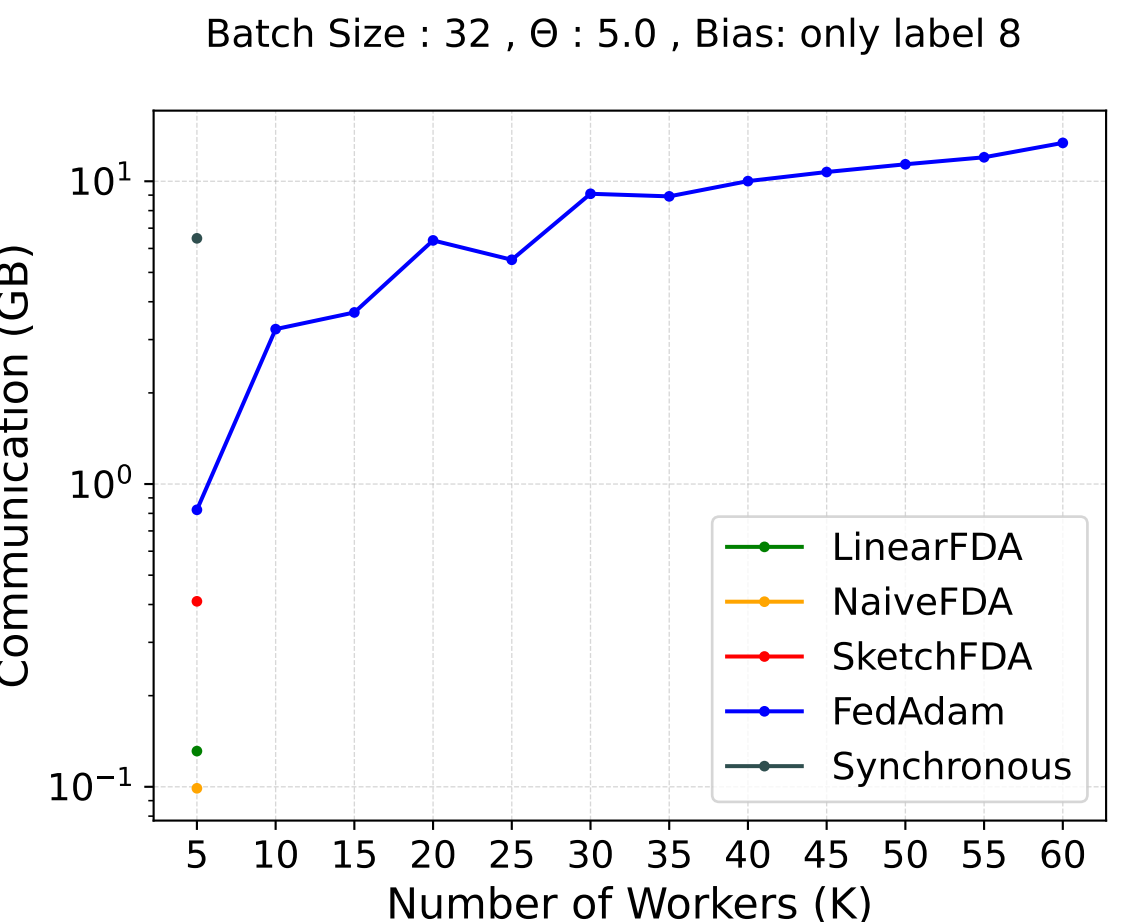
40
45
50
55
60
Number of Workers (K)
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous


Batch Size : 32 , Θ : 5.0 , Bias: only label 8
Communication (GB)
10^{1}
10^{0}
10^{-1}
5
10
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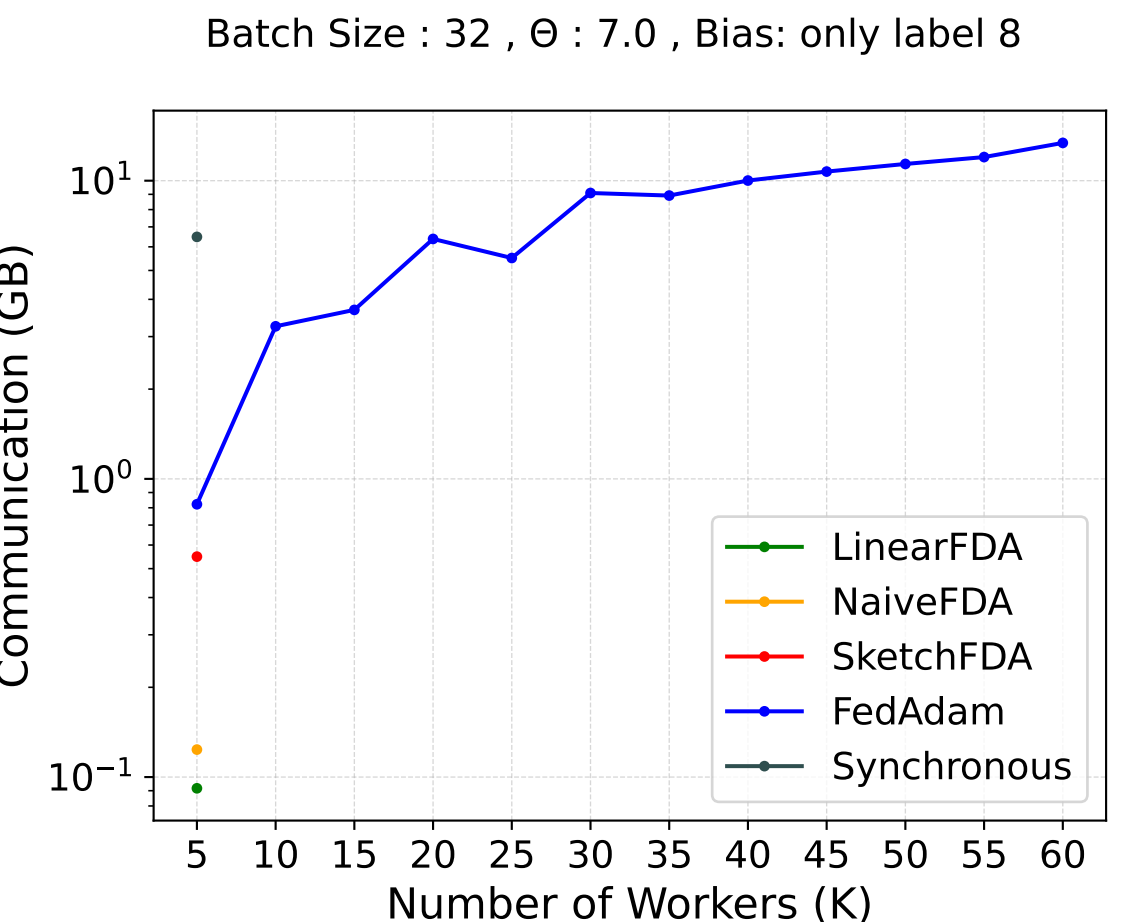
55
60
Number of Workers (K)
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous


Batch Size : 32 , Θ : 7.0 , Bias: only label 8
Communication (GB)
10^1
10^0
10^{-1}
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45
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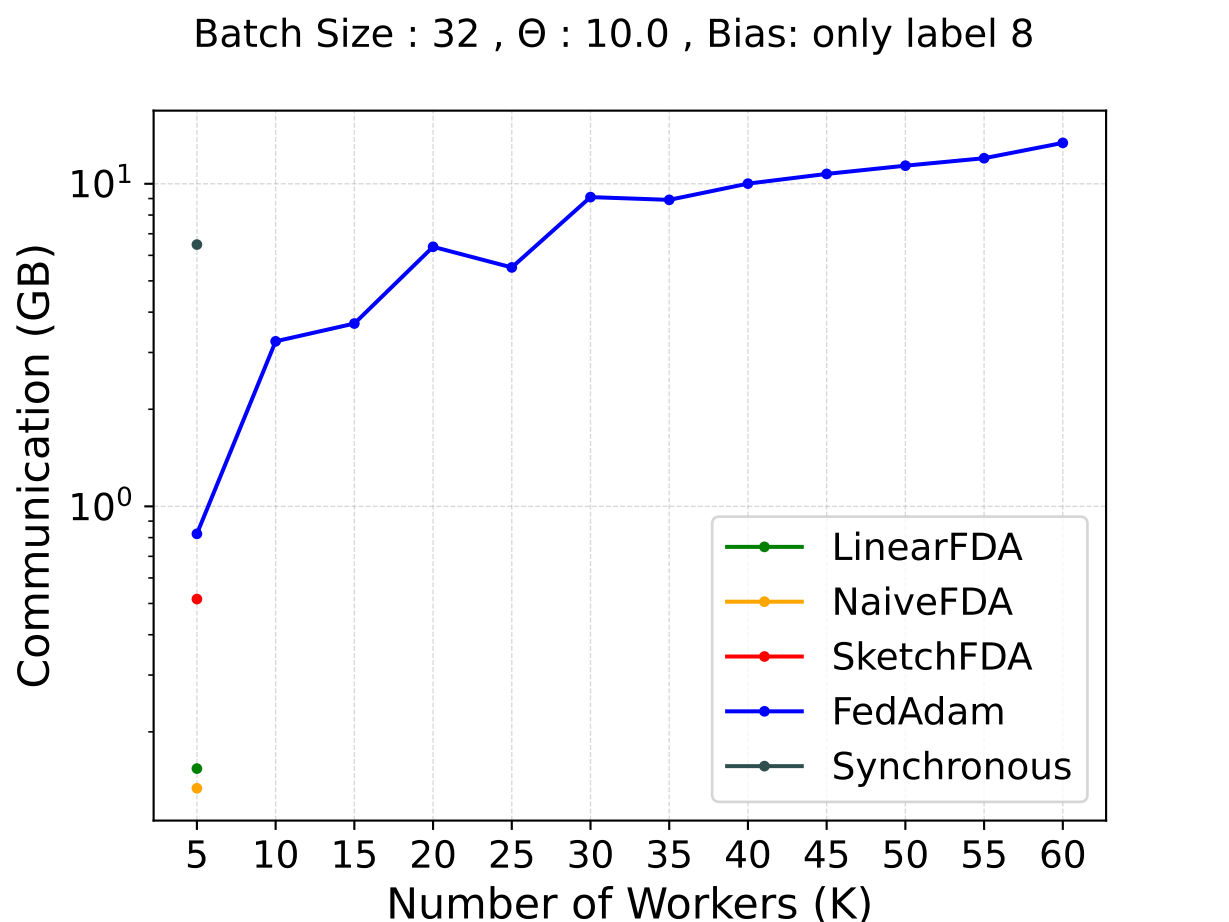
55
60
Number of Workers (K)
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous


Batch Size : 32 , Θ : 10.0 , Bias: only label 8
Communication (GB)
10^1
10^0
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40
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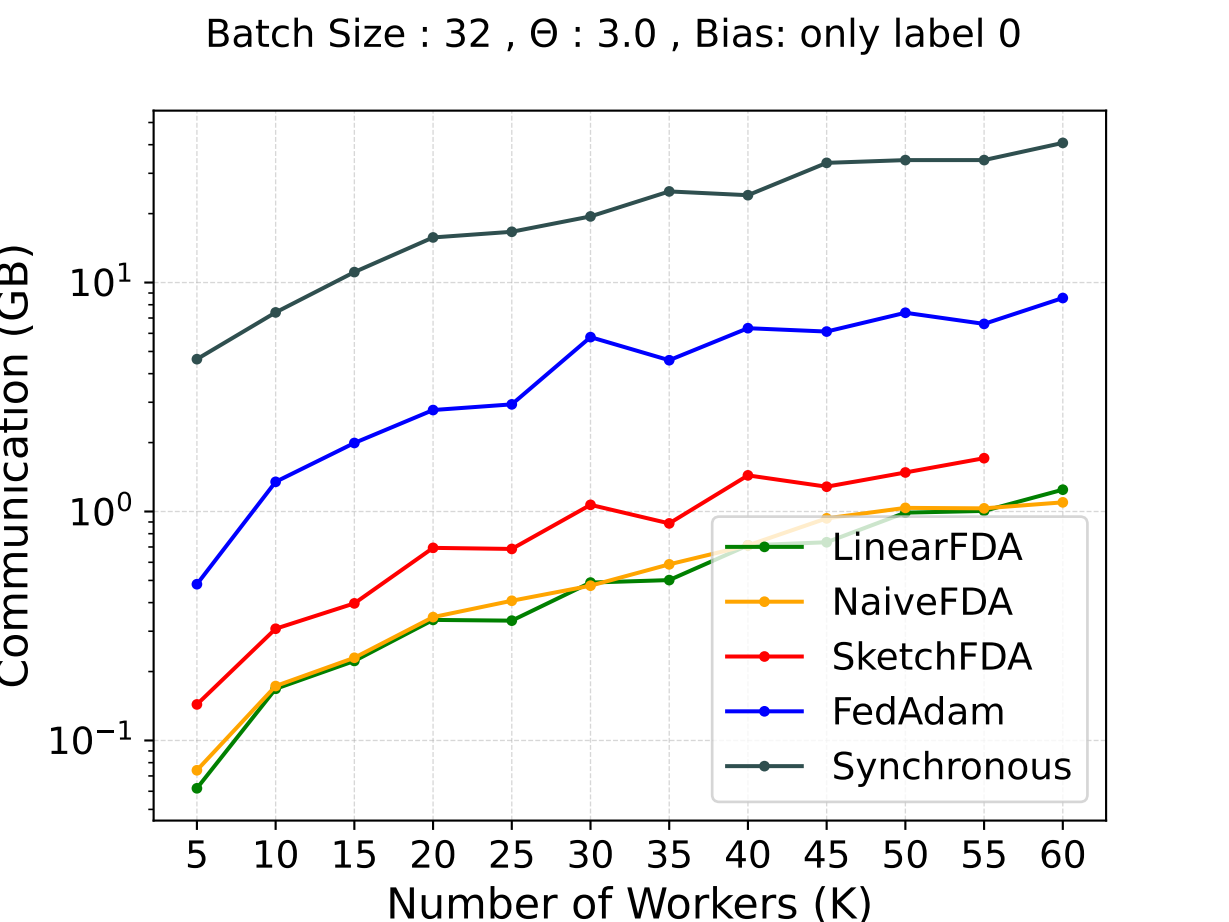
55
60
Number of Workers (K)
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous


Batch Size : 32 , Θ : 3.0 , Bias: only label 0
Communication (GB)
10^{1}
10^{0}
10^{-1}
5
10
15
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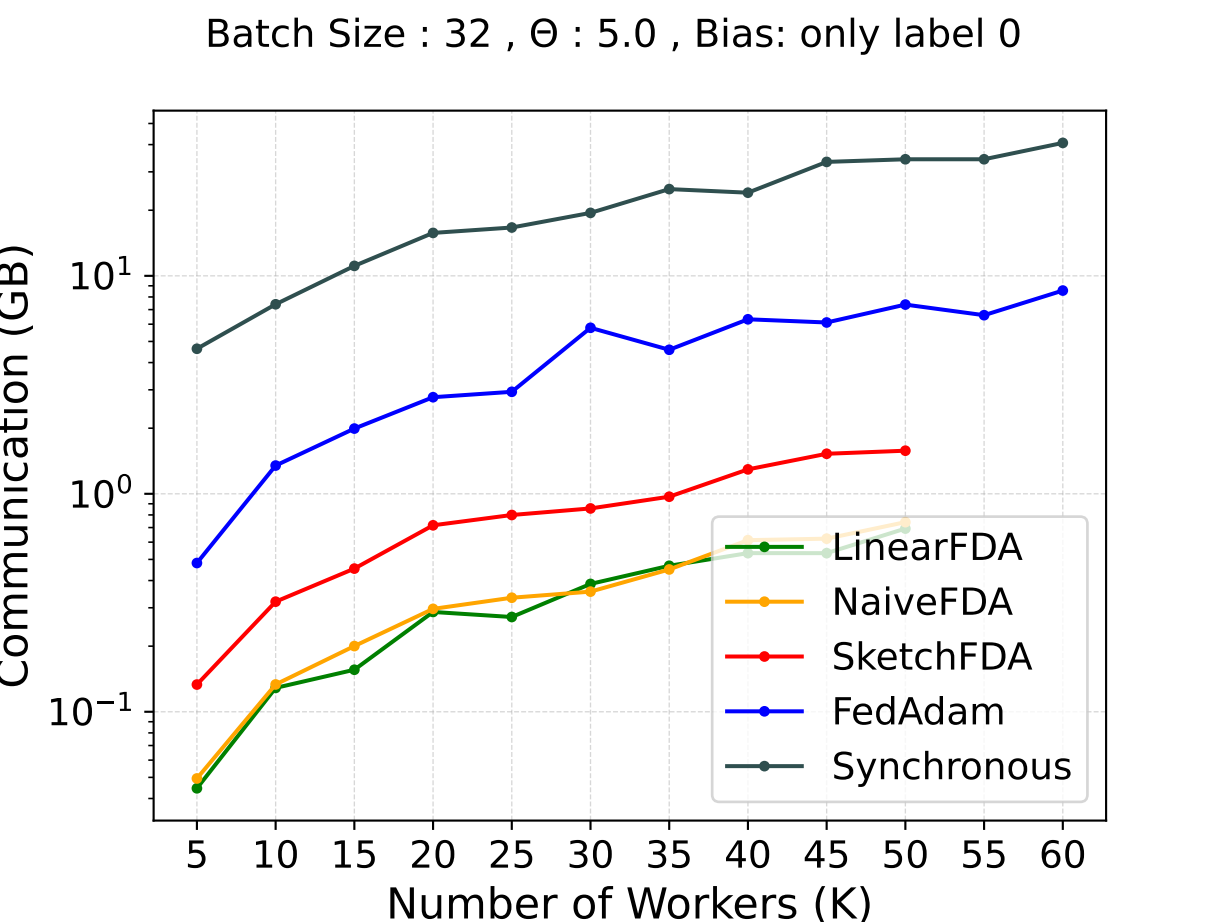
35
40
45
50
55
60
Number of Workers (K)
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous


Batch Size : 32 , Θ : 5.0 , Bias: only label 0
Communication (GB)
10^{1}
10^{0}
10^{-1}
5
10
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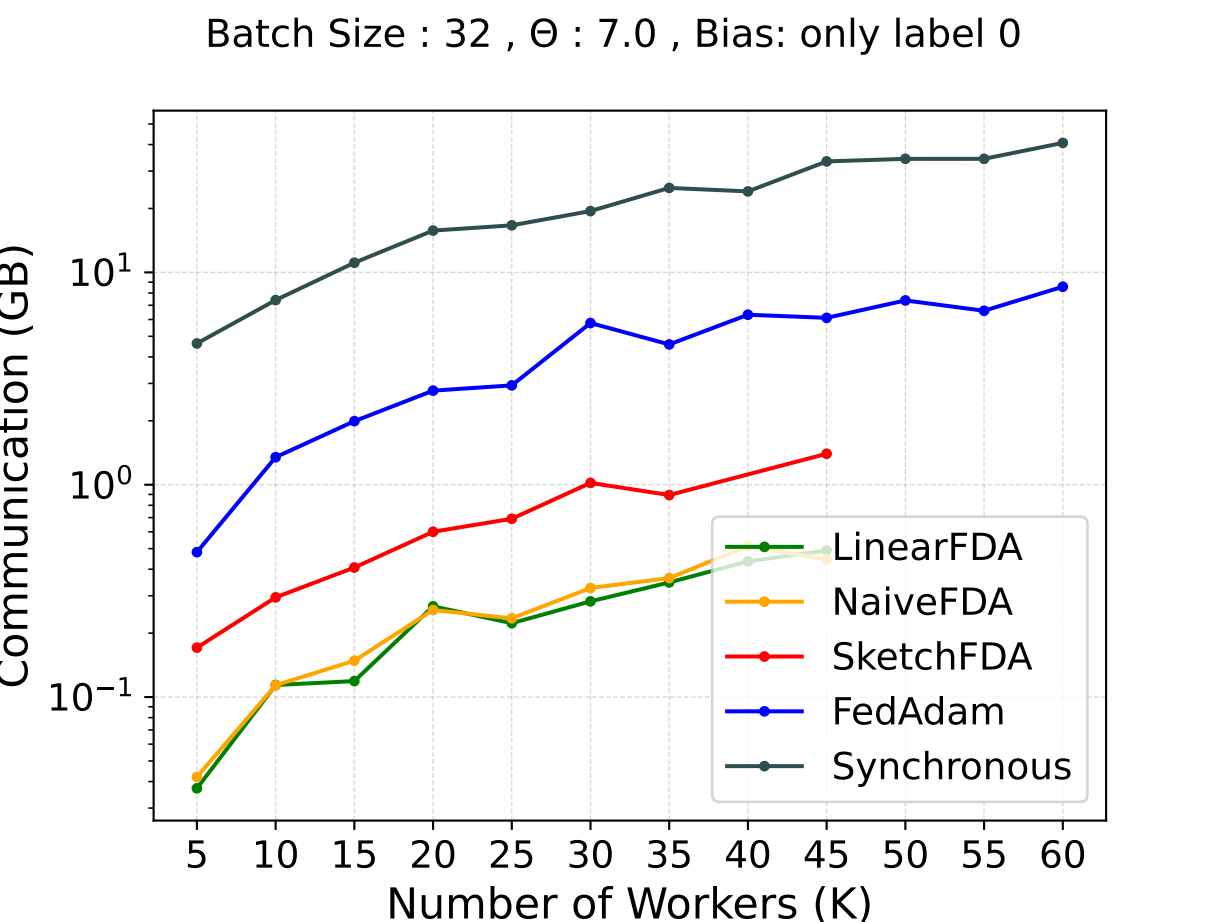
60
Number of Workers (K)
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous


Batch Size : 32 , Θ : 7.0 , Bias: only label 0
Communication (GB)
10^{1}
10^{0}
10^{-1}
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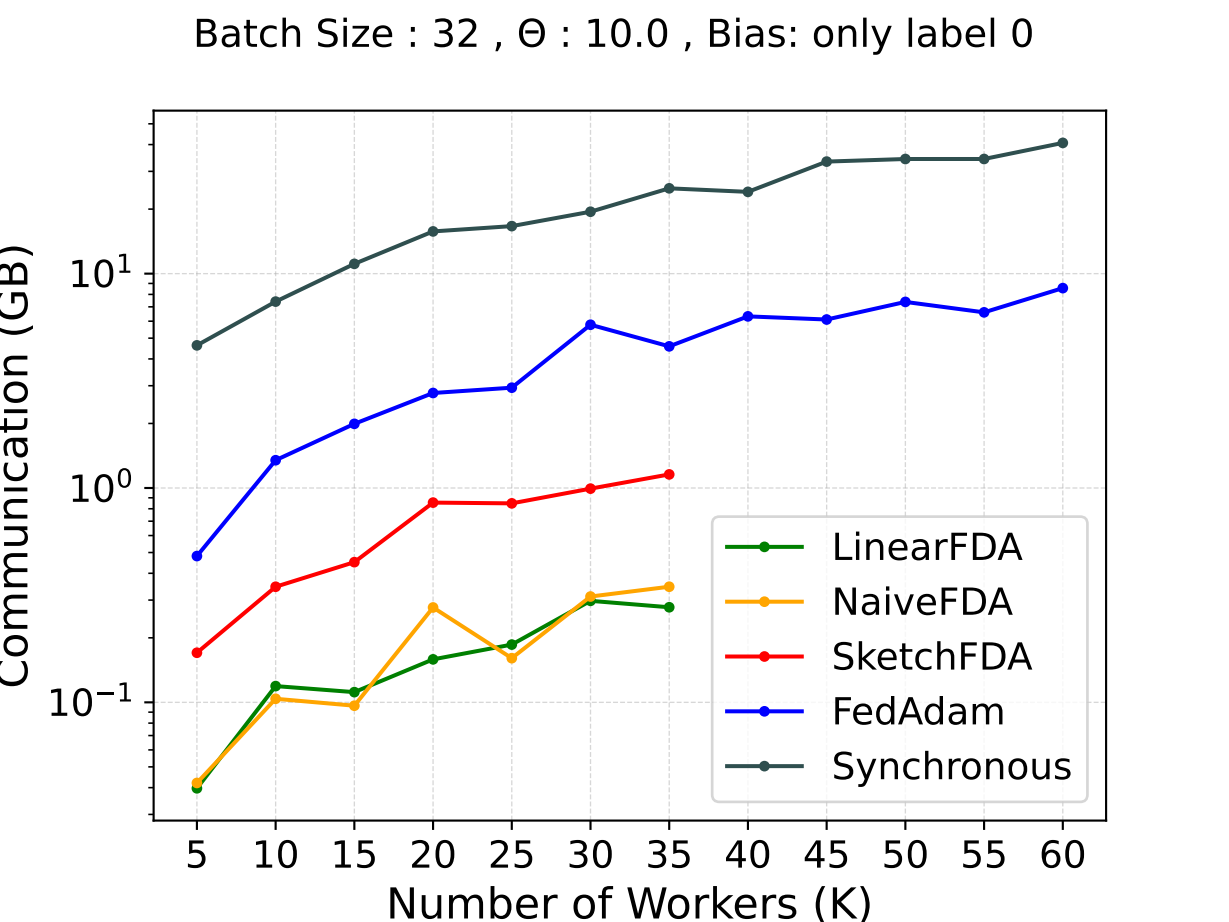
60
Number of Workers (K)
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous


Batch Size : 32 , Θ : 10.0 , Bias: only label 0
Communication (GB)
10^{1}
10^{0}
10^{-1}
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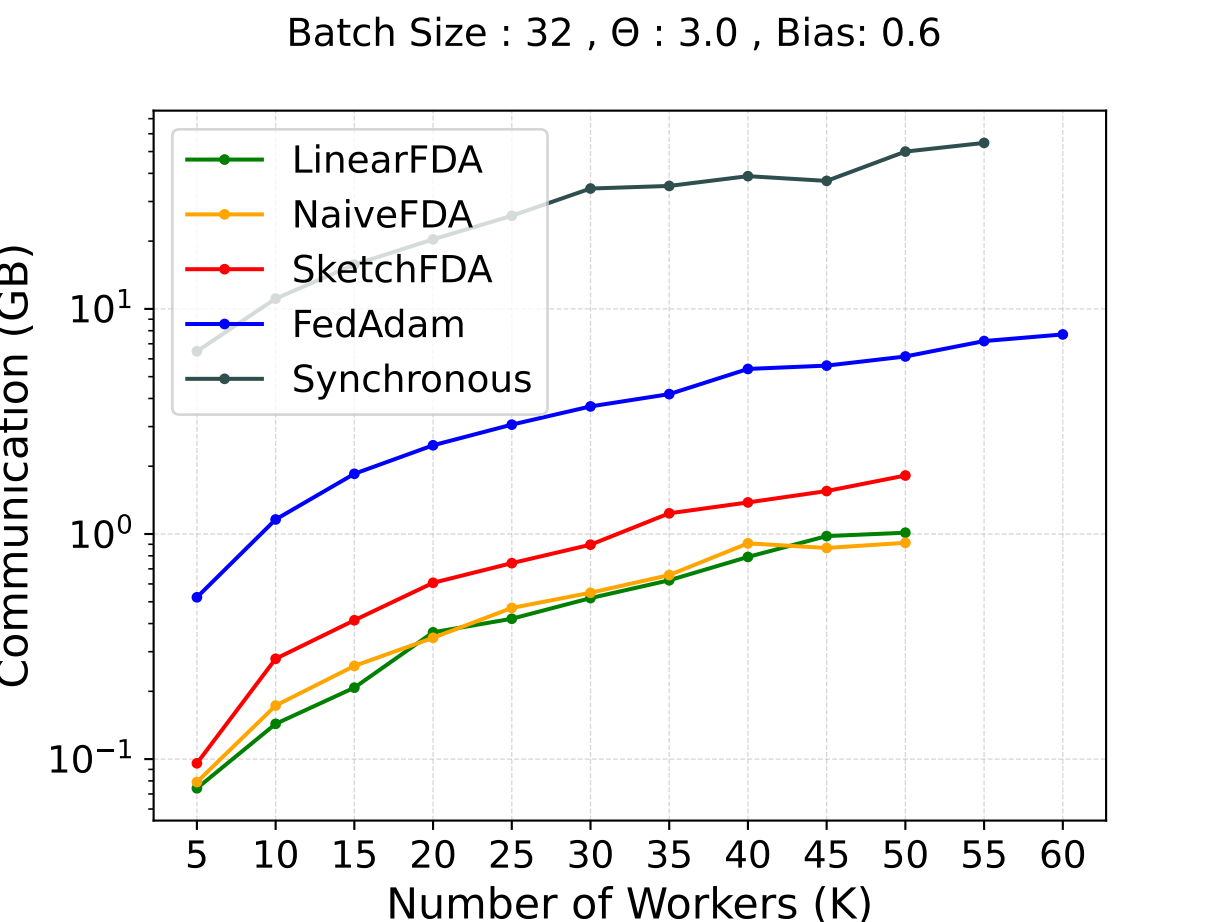
55
60
Number of Workers (K)
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous


Batch Size : 32 , Θ : 3.0 , Bias: 0.6
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous
Communication (GB)
10^{1}
10^{0}
10^{-1}
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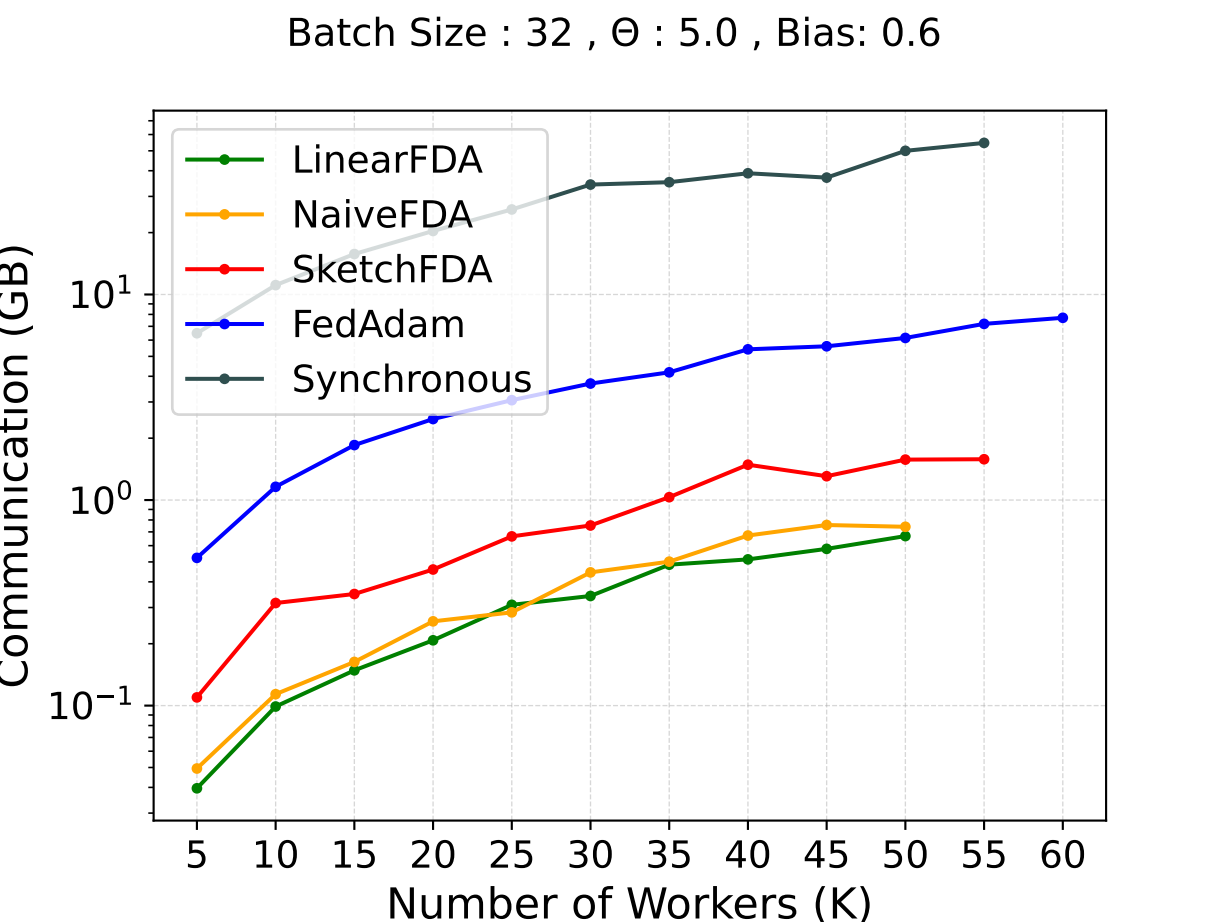
55
60
Number of Workers (K)


Batch Size : 32 , Θ : 5.0 , Bias: 0.6
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous
Communication (GB)
10^{1}
10^{0}
10^{-1}
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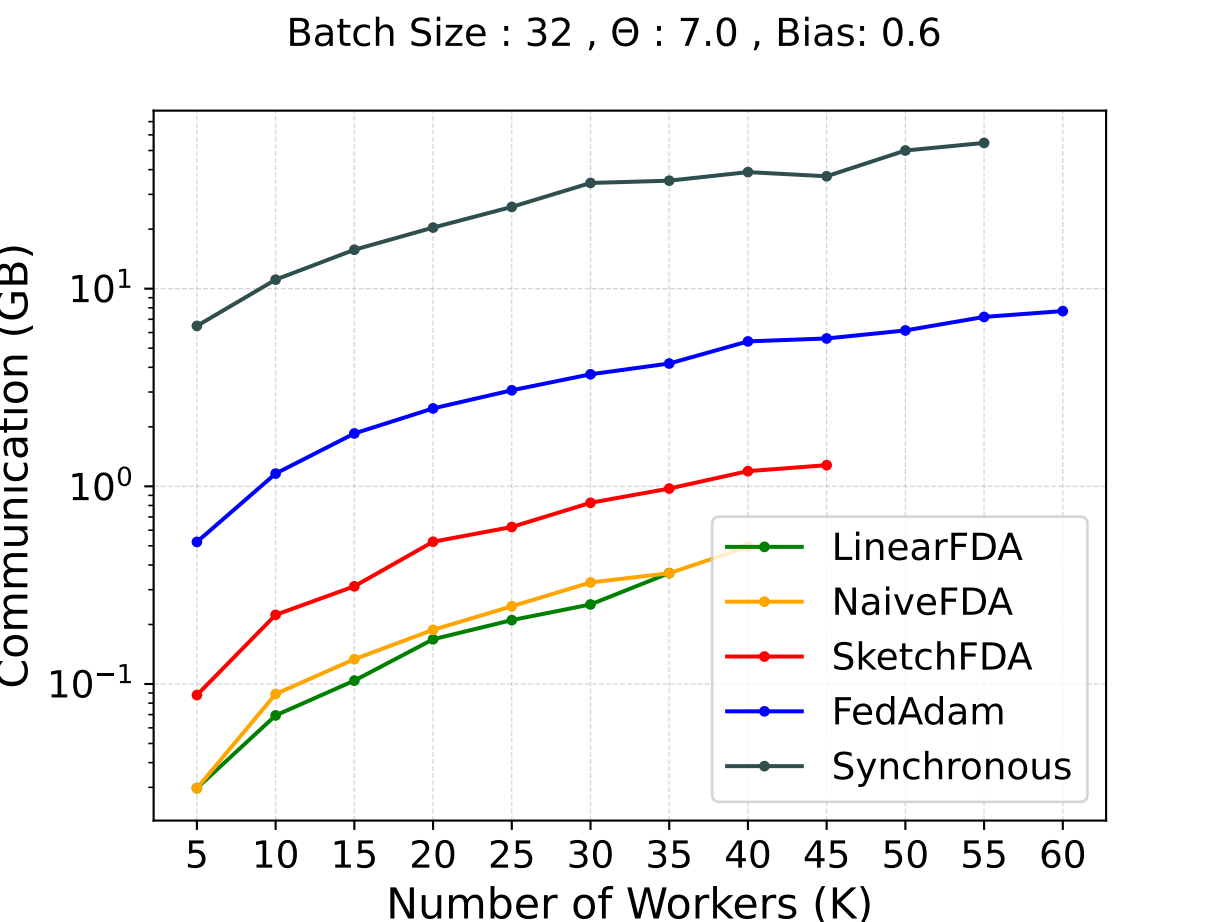
55
60
Number of Workers (K)


Batch Size : 32 , Θ : 7.0 , Bias: 0.6
Communication (GB)
10^1
10^0
10^{-1}
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous
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45
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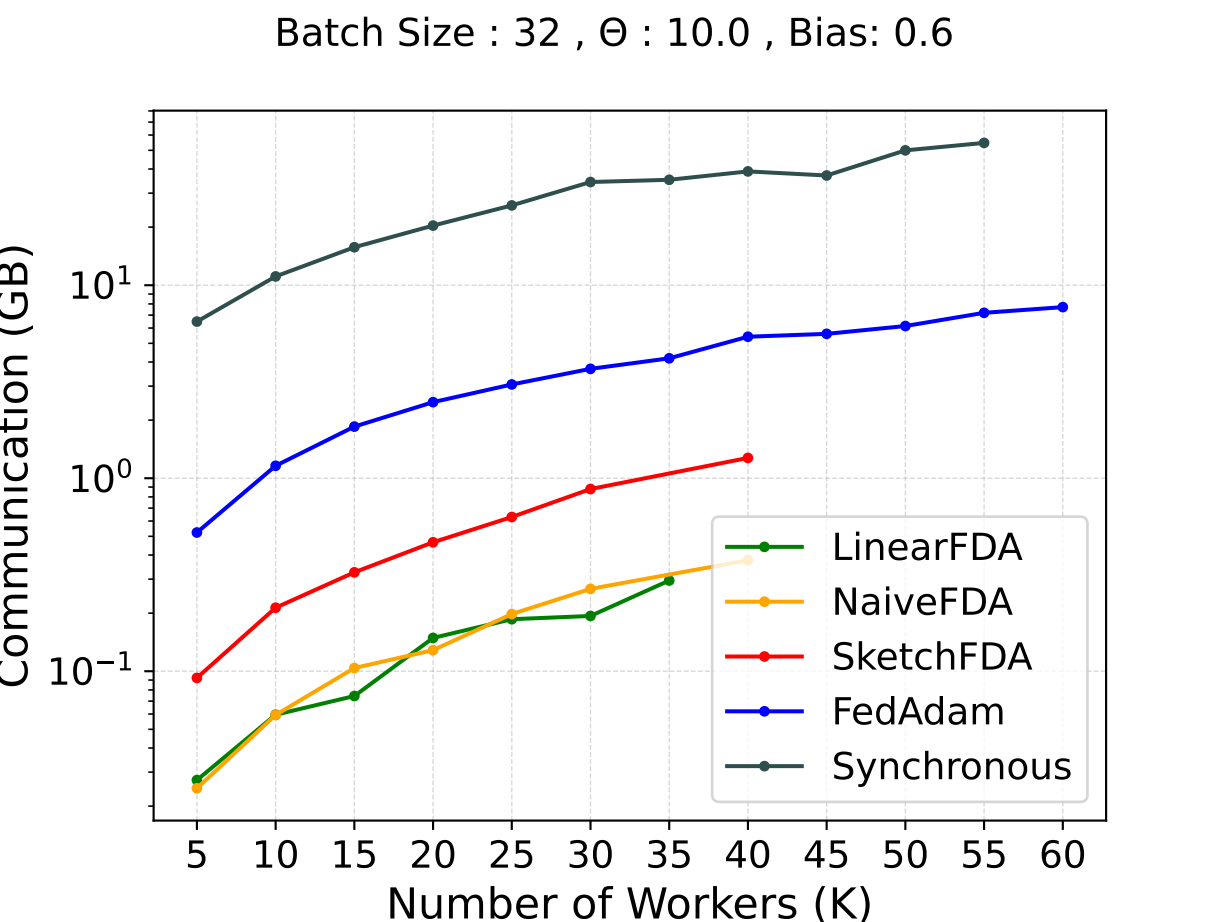
60
Number of Workers (K)


Batch Size : 32 , Θ : 10.0 , Bias: 0.6
Communication (GB)
10^{1}
10^{0}
10^{-1}
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous
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45
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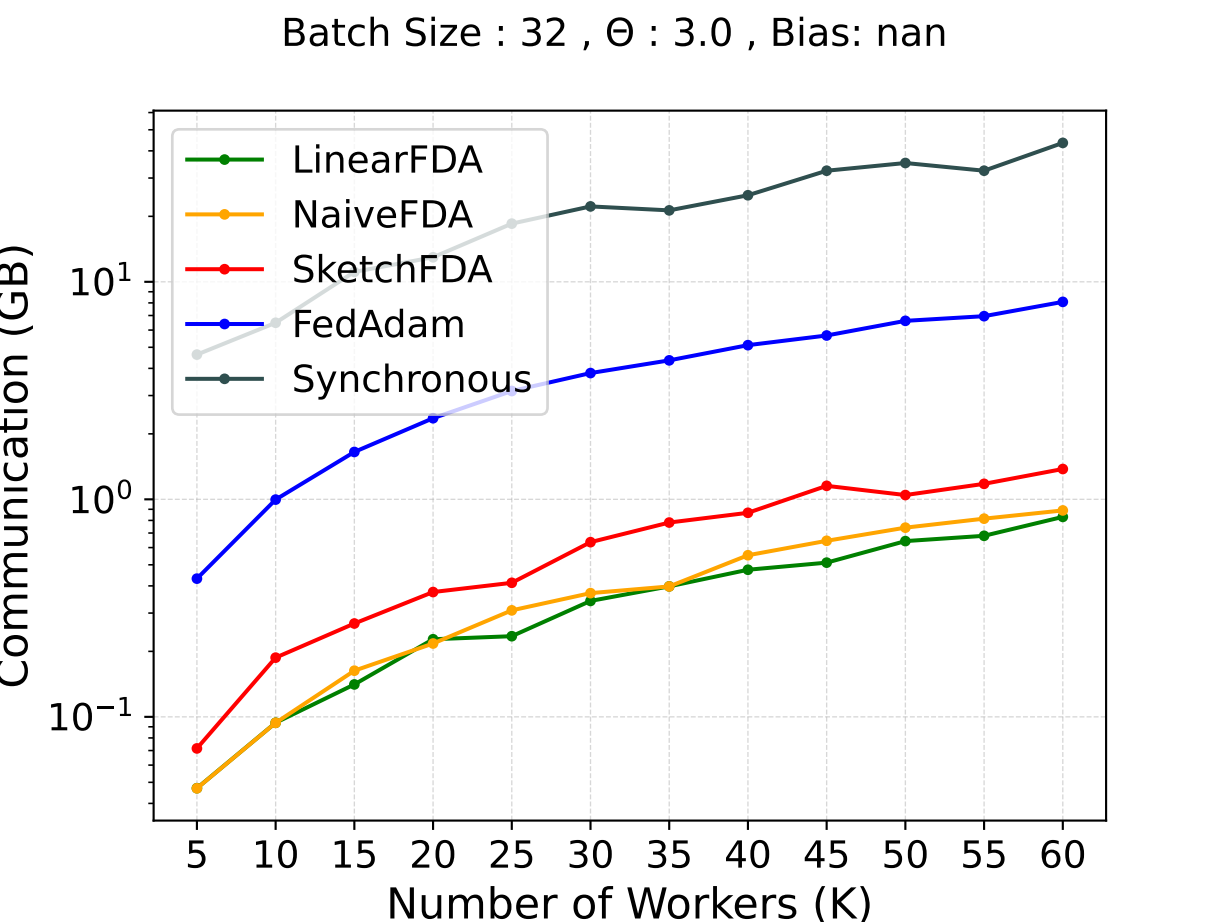
55
60
Number of Workers (K)


Batch Size : 32 , Θ : 3.0 , Bias: nan
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous
Communication (GB)
10^{1}
10^{0}
10^{-1}
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55
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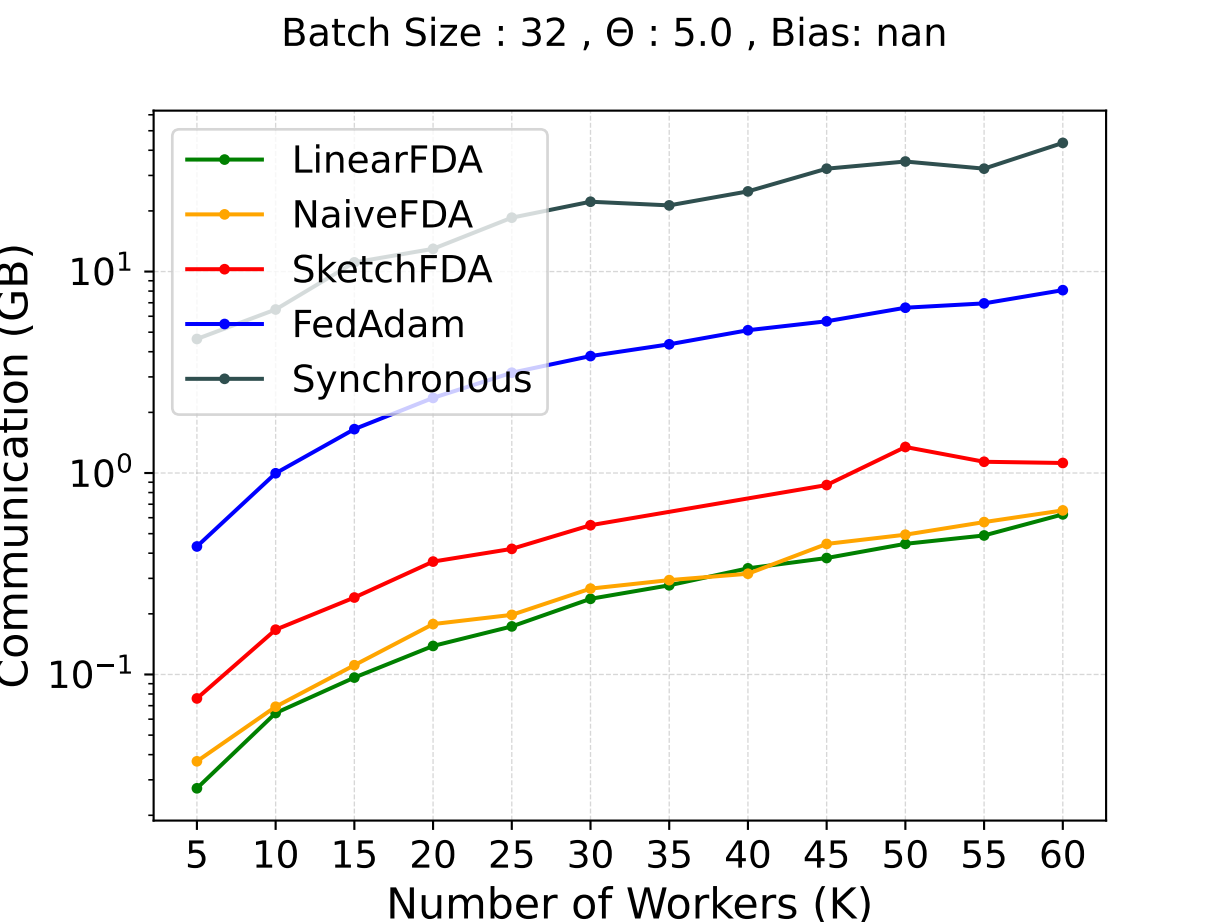
Number of Workers (K)


Batch Size : 32 , Θ : 5.0 , Bias: nan
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous
Communication (GB)
10^{1}
10^{0}
10^{-1}
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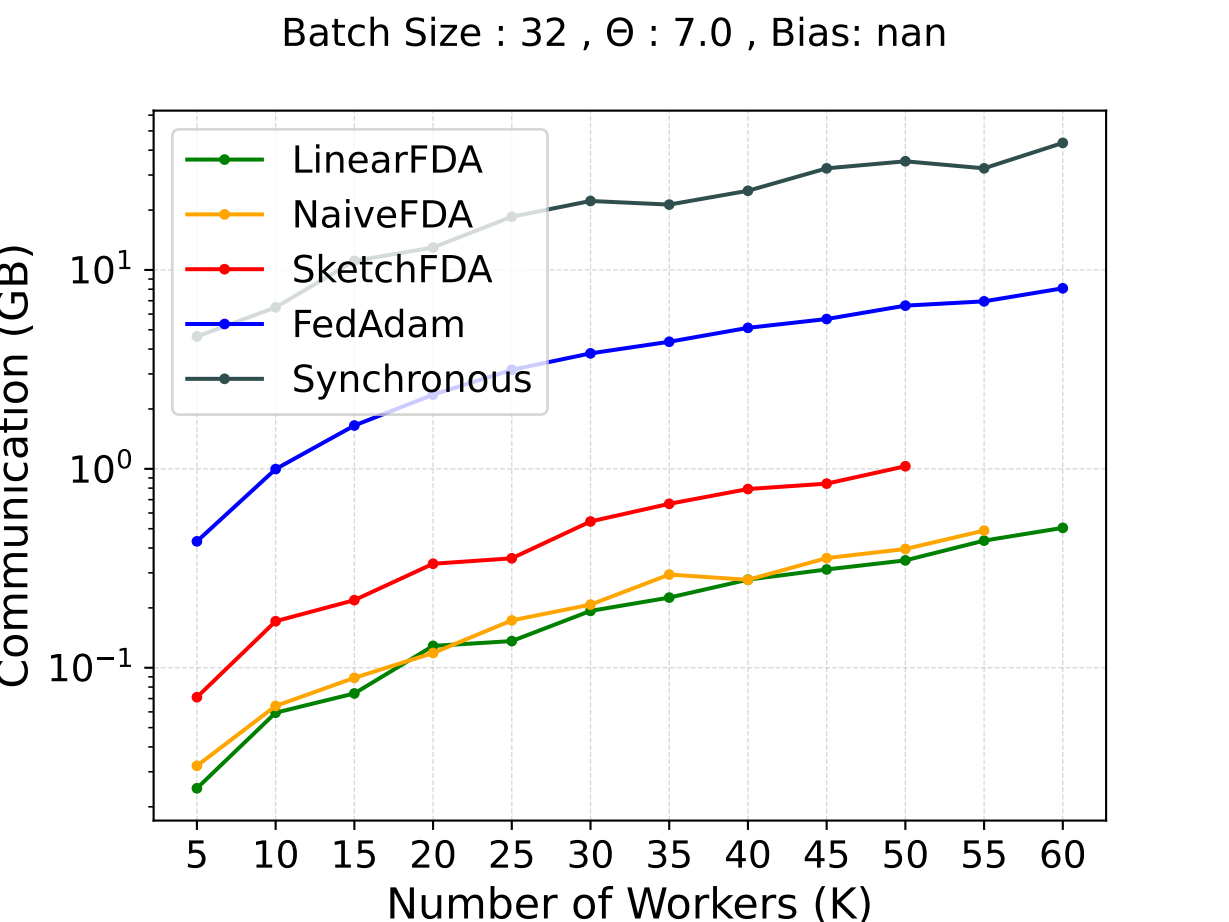
Number of Workers (K)


Batch Size : 32 , Θ : 7.0 , Bias: nan
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous
Communication (GB)
10^{1}
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10^{-1}
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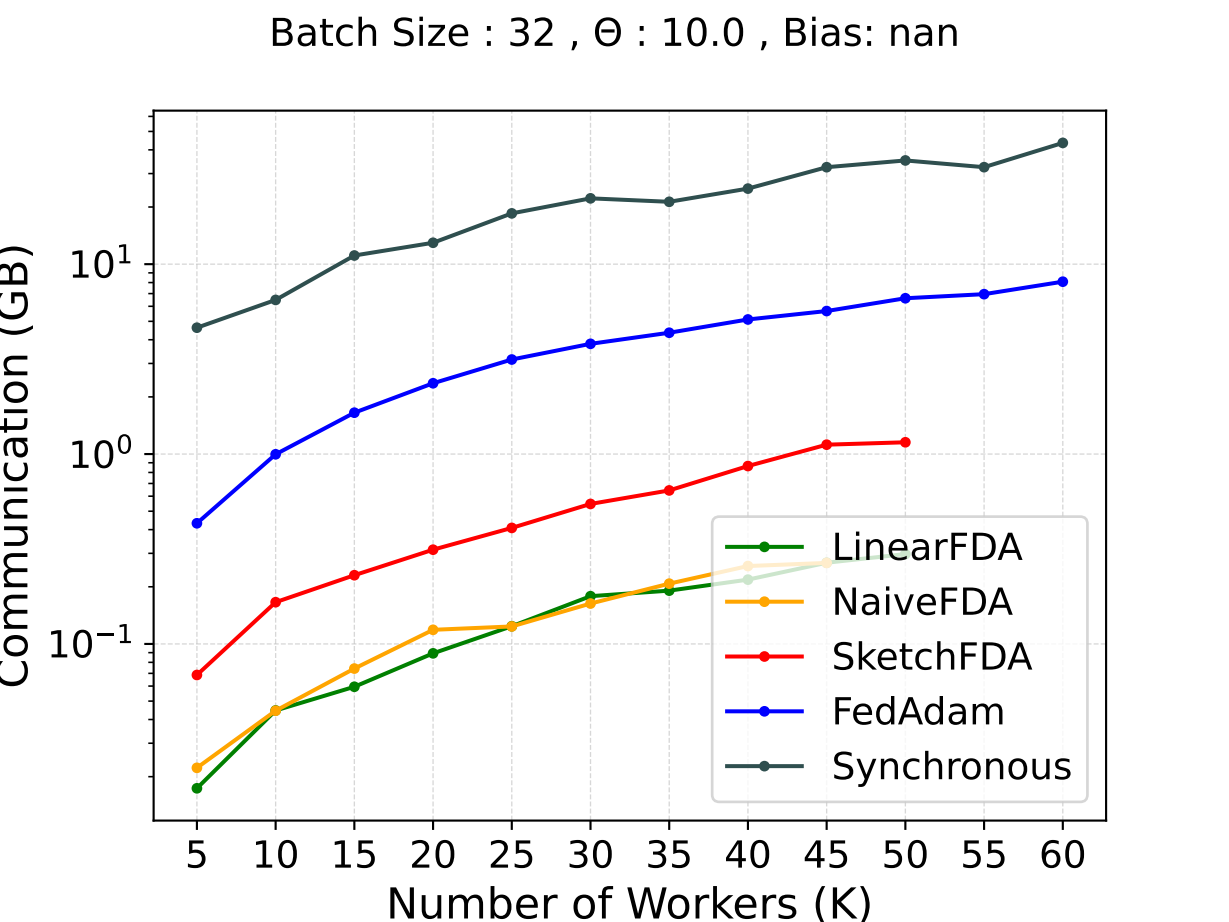
Number of Workers (K)


Batch Size : 32 , Θ : 10.0 , Bias: nan
Communication (GB)
10^{1}
10^{0}
10^{-1}
5
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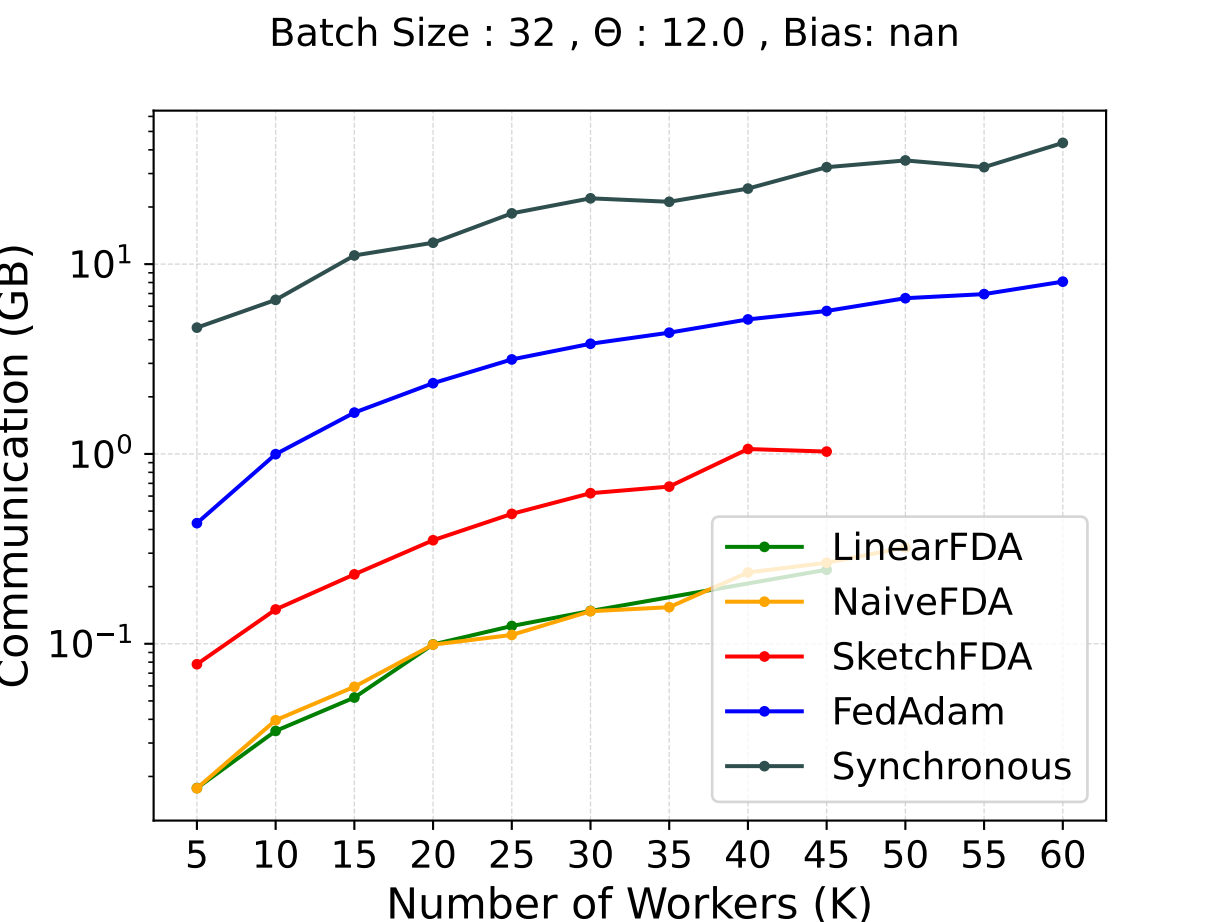
Number of Workers (K)
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous


Batch Size : 32 , Θ : 12.0 , Bias: nan
Communication (GB)
10^{1}
10^{0}
10^{-1}
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous
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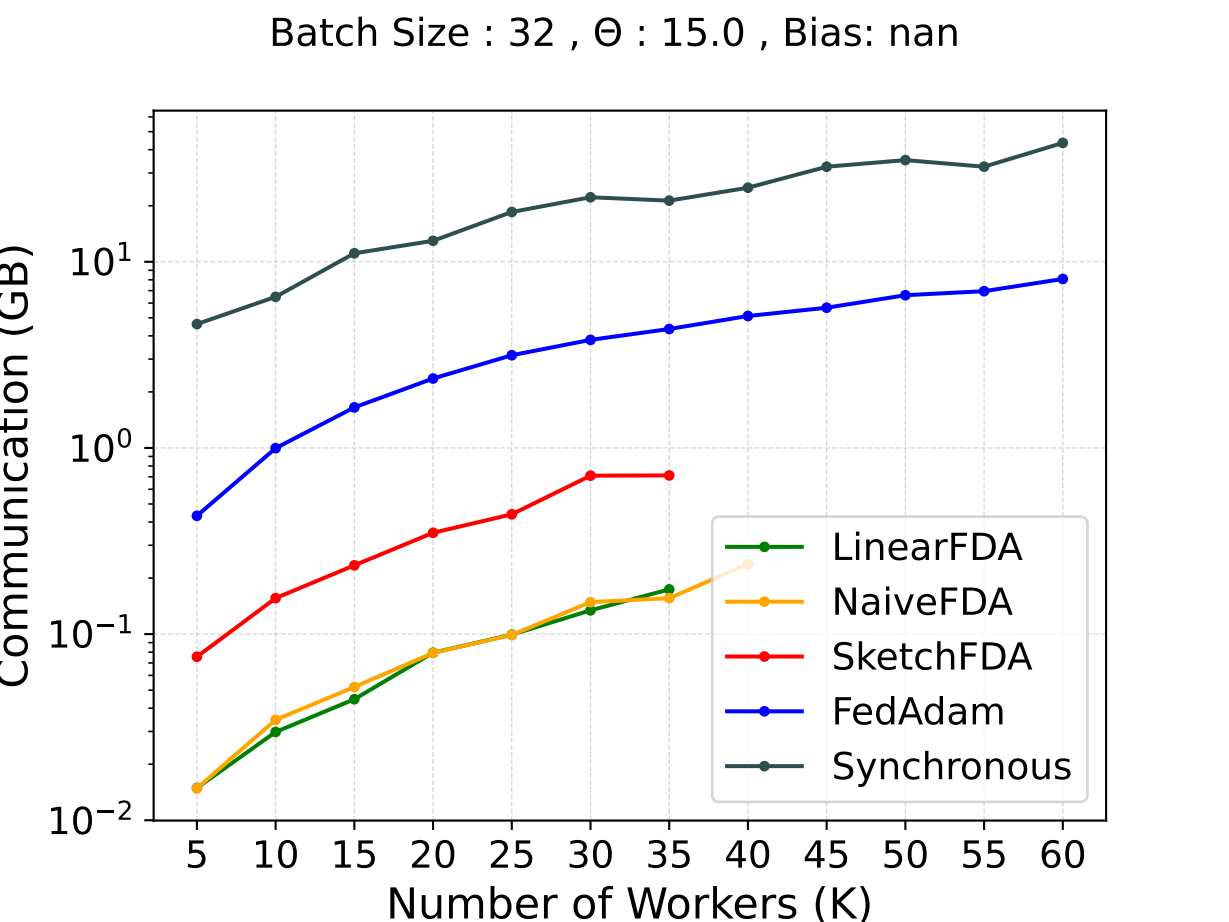
Number of Workers (K)


Batch Size : 32 , Θ : 15.0 , Bias: nan
Communication (GB)
10^{1}
10^{0}
10^{-1}
10^{-2}
5
10
15
20
25
30
35
40
45
50
55
60
Number of Workers (K)
LinearFDA
NaiveFDA
SketchFDA
FedAdam
Synchronous